



Action Requested/Required:

- Vote/Action Requested
- Discussion or Presentation Only
- Public Hearing
- Report Date: _____
- Hearing Date: _____
- Voting Date: _____

Department: Engineering **Presenter(s) & Title:** Bethany Watson
City Engineer

Agenda Item Title:

Discussion on Task Order 1 to TetraTech for AWIA RRA and ERP Update in the amount of \$112,484

Summary:

City Staff has requested a proposal for an update to the City of Canton Water RRA and ERP Update. As a water provider, the City of Canton is required under America's Water Infrastructure Act (AWIA) to maintain an Emergency Response Plan (ERP) as well as conduct a Risk and Resilience Assessment (RRA). The Cities current ERP and RRA is not sufficient to meet the requirements of the AWIA for the number of customers the City currently serves. This plan is required to be updated every 5 years. This project will include project management, data collection and gap analysis, site visits, a risk and resilience assessment, and emergency response plan. These plans are required to be updated by the end of this year.

Budget Implications:

Budgeted? Yes No N/A

Total Cost of Project: Check if Estimated

Fund Source: General Fund Water & Sewer Sales Tax Other:

Staff Recommendations:

Staff recommends approval on Task Order 1 to TetraTech for AWIA RRA and ERP Update in the amount of \$112,484.

Reviews:

Has this been reviewed by Management and Legal Counsel, if required? Yes No

Attachments:

Proposal
Task Order 1

THIS SERVES AS A SUPPLEMENTAL AGREEMENT made as of _____, between the **City of Canton, Georgia, (OWNER)** and **Tetra Tech, Inc (Consultant)**.

Owner and **Consultant** have previously executed a Professional Services Agreement dated November 20, 2025 that defines general terms under which **Consultant** will furnish General Consulting Engineering Services and Project Engineering Services to **Owner**. **Owner** now wishes to engage **Consultant** to provide services in connection with the Project known as Task Order No. 1 –AWIA RRA and ERP Update. The Scope of Services is defined in Task II of the attached letter.

The fee for these services will be a Time and Expense Amount as outlined in Exhibit A of the Professional Services Agreement. Payments will be made monthly in accordance with the number of hours worked by personnel of **Consultant**. The amount will be a not to exceed amount of One hundred twelve thousand four hundred eighty four dollars (\$112,484.00).

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

Owner:
City of Canton _____

Bill Grant _____
Name

Mayor _____
Title

Signature

Attest:

Consultant:
Tetra Tech Inc. _____

By (Typed Name)

Title

Signature

Attest:

City of Canton, GA AWIA RRA and ERP Update



March 2026

1.0 PROJECT UNDERSTANDING

As a water purveyor providing drinking water to a population of approximately 16,000 people, the City of Canton (City) is required under America's Water Infrastructure Act (AWIA) to maintain an Emergency Response Plan (ERP) as well as conduct a Risk and Resilience Assessment (RRA), which will both include cybersecurity assessments as outlined in the AWIA requirement. To support the City in conducting the RRA and updating the ERP, Tetra Tech has developed this proposal to summarize our approach to these important tasks.

In helping clients with AWIA compliance, Tetra Tech relies on methodologies designated under the 2002 Federal SAFETY Act to minimize those clients' exposure to associated liability. We recommend a workshop approach using the Department of Homeland Security-certified Risk Analysis and Management for Critical Asset Protection (RAMCAP) methodology described in the AWWA J100 Manual (*Risk Analysis and Management for Critical Asset Protection; Standard for Risk and Resilience Management of Water and Wastewater Systems*; ANSI/AWWA, 2010). For completion of the RRA, Tetra Tech will incorporate the *Program to Assist Risk & Resilience Examination* (PARRE) analytical tool, which we believe to be the superior tool for cities such as the City of Canton. The following sections summarize our approach to this critical project.

2.0 PROJECT TASKS

TASK 1 - PROJECT MANAGEMENT

Tetra Tech will begin the project by conducting an on-site project kickoff meeting with the City's assigned Project Manager and other key project team members. This meeting will be facilitated by Tetra Tech and serve as an opportunity to confirm the project goals and objectives, the project schedule and deliverables, and outline the communications structure. Additionally, during the project kickoff meeting, Tetra Tech will collect information on system updates that are relevant to the RRA & ERP; discuss the plans, policies, and procedures to be reviewed in Task 2 (Data Collection and Gap Analysis); and determine which stakeholder the City would like to have serve on the Planning Team. The meeting is expected to last no longer than two hours.

Following the meeting, Tetra Tech will develop a Project Work Plan that outlines all action items and will submit it to the City's Project Manager for review and approval.

Deliverables:

- Project kick-off meeting agenda, sign-in sheet and meeting minutes
- Monthly invoice with updated progress report and updated project schedule

Assumptions:

- Project kickoff meeting will require approximately two (2) hours and will be on-site

TASK 2 - DATA COLLECTION AND GAP ANALYSIS

Data collection will be a critical path item in meeting AWIA's regulatory requirements. Tetra Tech will address this need by developing a data needs list using the AWIA requirements as a minimum baseline that will be submitted to the City. Data gathering, through existing documentation and field assessment, will address the following:

- Malevolent acts

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- Monitoring practices
 - Operation and maintenance
 - Natural hazards
 - Chemical handling
 - Criticality Data

With the data collection asset priorities updated and objectives outlined, Tetra Tech will identify the status of existing systems and analyze deficits per U.S. Environmental Protection Agency (EPA) guidelines and the City's objectives. At a minimum, this assessment will include the following system assets:

- Accessible pipes
- Raw water collection and intake
- Constructed conveyances & physical barriers
- Source water
- Pretreatment
- Staffed facilities
- Treatment
- Storage and distribution facilities
- IT/Billing/SCADA System

On the day of the on-site project kickoff meeting, Tetra Tech's Operational Technology (OT) Cybersecurity Team will complete data collection activities and may request supplemental information from designated City staff, as needed.

Deliverables:

- Request for Information (RFI)

Assumptions:

- Requested data will be provided to Tetra Tech within two (2) weeks of the initial request, and follow-up data calls will be held between Tetra Tech and the City if necessary
- Documentation requested to support the project will be provided electronically within 5 business days to maintain the project schedule

TASK 3 - SITE VISITS

Tetra Tech will conduct site visits of the City's selected water infrastructure and facilities staffed by water utility personnel. Tetra Tech will assess key sites for field investigations, which will determine the ability of current protection systems to withstand each identified threat.

The site visits will include identifying access points, common areas, security concerns, and evidence of past breaches (such as holes in fences, broken locks, and graffiti). Tetra Tech will also look to identify countermeasures such as asset placement, elevation, security cameras, CCTV, badge access, lighting, locking mechanisms, fencing, gates, and other security measures. The site visits will include interviews with facility staff to gather their input on the overall function and design, how the assets/facilities operate, staffing levels, safety and security concerns, including past or potential issues, and what the system-wide impact would be if a particular asset were impacted by a threat.

Additionally, during the site assessments, Tetra Tech will look to identify buffer zones, hardening measures and ease of access for malicious actors such as active shooters (in the case of staffed locations), the location of critical systems, access to and redundancy of site operations, continuity concerns such as backup power and/or alternative methods of operation, and single points of failure. Tetra Tech's OT Cybersecurity Team will also visit appropriate sites to review the major cyber assets associated with the IT Enterprise, Financial and SCADA system on the day of the on-site project kickoff meeting.

Deliverables:

- No deliverables expected

Assumptions:

- Up to three (3) Tetra Tech team members will be onsite to conduct the assessments, with two (2) team members evaluating the physical assets and one (1) team member focused on the cyber assets
- Site visit assessments are expected to last one (1) week in total and will be coordinated with the City before they begin

TASK 4 - RISK AND RESILIENCE ASSESSMENT

The core of the RRA will comprise site visits supported by an analysis and confirmation process conducted through two sequential workshops. The workshops are expected to occur following completion of the site visits.

4.1 Workshop #1 – Asset Prioritization and Risk/Consequence Review Workshop

It is assumed that the City's existing security, planning, and vulnerability documents will provide the basis for the workshop, which include:

- The EPA document *Baseline Information on Malevolent Acts for Community Water Systems*
- The vulnerability assessment completed as part of the City's 2020 RRA

Tetra Tech's OT Cybersecurity Team will develop the cyber portion of the RRA using these materials and the information gathered during the data collection and site visits outline in Tasks 2 and 3.

Tetra Tech will develop a physical asset list based on the 2020 RRA asset list provided by the City. Each site will be rated based on a criticality matrix in accordance with the AWWA J100 methodology. Tetra Tech will prepare for and facilitate the workshop to introduce the RAMCAP assessment approach and develop the physical characterization. This workshop will be delivered in a virtual format using webinar or video-conferencing platforms. The workshop is expected to take half a day.

At the same workshop, threat-asset pairs will be confirmed or updated to assess malevolent acts and natural hazards, including threats that can impact off-site assets controlled by others. We anticipate that the threat-asset pair analysis will be limited to 10 assets. Tetra Tech will confirm or revise the asset list with the City during the site visits discussed in Task 3. This process will identify reasonable, worst-case threats using the RAMCAP table of potential hazards and threat scenarios. These are based on physical and cybersecurity guidance identified as AWIA consensus standards for water utilities, including:

- AWWA J100 Standard
- AWWA Cyber Security Guidance

Tetra Tech's OT Cybersecurity Team will, if necessary, conduct an additional virtual workshop with the City's IT and SCADA team to complete the EPA's Water Cybersecurity Assessment Tool (WCAT) for inclusion in the RRA deliverable.

Tetra Tech will compile the information to be used to calculate risk and resilience for each threat-asset pair. We will confirm or revise the consequence analysis to rank threat-asset pairs according to the magnitude of resulting consequences, using a consequence scale provided in the PARRE tool and RAMCAP methodology.

Consequences will be estimated in terms of loss of life and serious injury; financial losses; duration and severity of service denial; and economic losses to the utility. Each site will be classified based on the criticality of its cyber assets as defined in the RAMCAP methodology.

4.2 Workshop #2 – Vulnerability, Threat, and Risk Analysis Workshop

Tetra Tech will facilitate a vulnerability and threat analysis workshop with the water system to determine the ability of current protection systems to withstand each specified threat in each threat-asset pair for up to 10 assets. Tetra Tech will present threat analysis assumptions during the workshop to aid with estimating the likelihood of a malevolent act or natural hazard based on current threats and historical records. The information gathered during this workshop will serve as the basis for the subsequent risk and resilience analysis task. This workshop will be delivered in a virtual format using webinar or video-conferencing platforms.

4.3 Draft and Final RRA Development

Tetra Tech will develop a draft of the RRA for the City’s review. After the review Tetra Tech will conduct a virtual review workshop, if warranted, based on the level of water system and cybersecurity provided comments. Following final comments, Tetra Tech will finish the RRA so the city can finish the online certification submittal.

Deliverables:

- Draft RRA
- Final RRA

Assumptions:

- Tetra Tech will confirm the threat-asset pairs to be evaluated using the PARRE Tool during Workshop #1
- Threat-asset pair analysis will be limited to 10 assets
- No GIS support is required for development of the deliverables
- Deliverables will be submitted to the City in draft format, with comments and feedback required within two weeks or as specified in the scope above; upon incorporation of revisions, a final submission will be provided to the City, and the deliverables will be considered final and accepted
- Workshop #1 is expected to require approximately four (4) hours and be virtual
- Workshop #2 is expected to require approximately two (2) hours and be virtual
- The Draft RRA review meeting is expected to require up to two (2) hours and be virtual
- The availability of Canton’s key personnel is critical to obtaining the information required for the overall success of this project. Information presented by the City’s key personnel will be accepted as factual, and no confirmation will be made.

TASK 5 - EMERGENCY RESPONSE PLAN

When RRA development workshops are completed, and the City’s project team’s focus can transition to the ERP, Tetra Tech will commence with the update of the City’s ERP to meet the AWIA requirements. This will include:

- Review of the 2020 City of Canton ERP
- Identification of updated threats, risks, and/or hazards to the system as identified in the RRA

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- Integration of system updates or changes since 2020
 - Integration of updated system plans, policies, or procedures starting in 2020

Tetra Tech's OT Cyber Team will develop the cyber portion of the ERP using these materials and the information gathered during the data collection and site visits outlined in Tasks 2 and 3.

5.1 Stakeholder Identification and Plan Review Meeting

Tetra Tech will begin the ERP update meeting with the City to discuss the 2020 ERP submitted to the EPA. During this meeting, Tetra Tech's team will discuss system updates that have been put in place since the plan was developed; discuss plans, policies, and procedures that may have been updated since the plan was written and need to be integrated into the 2025 update; and determine which City staff and stakeholders will serve on the Planning Team. This meeting will be held virtually and last approximately one hour.

Following the meeting, Tetra Tech's team will review the 2020 ERP and as necessary supplemental planning documents, including current emergency response protocols, a list of available response resources, updated facility information, business continuity plans, and existing emergency preparedness and response procedures. This information will be compared with findings from the RRA to provide the Tetra Tech team with an understanding of current emergency response capabilities, potential support and mutual aid needs, and how to incorporate them into the updated ERP.

Tetra Tech will compare this information to what is in the City's 2020 ERP and present suggested changes and updates during Workshop #1.

5.2 Emergency Response Plan Workshop #1

The Tetra Tech team will virtually conduct ERP Workshop #1 using webinar or video-conferencing platforms. The purpose of the workshop will be to discuss the documentation reviewed in Task 4.1, review proposed updated ERP updates on a section-by-section basis, and to receive feedback and comments from the City's Planning Team. This meeting will last no longer than two hours, and three (3) Tetra Tech personnel will facilitate the meeting and take notes.

The Tetra Tech team will submit an agenda at least two business days in advance of the workshop and will develop a PowerPoint presentation to facilitate the conversation. Within seven (7) business days of the meeting taking place, Tetra Tech will provide a meeting summary of the information proposed to be included in the updated ERP and action items assigned during the meeting.

City staff will have two (2) weeks to review the recommended changes and provide feedback.

5.3 Emergency Response Plan Update

Following the two-week review period, Tetra Tech will begin the process of updating the ERP. As needed, Tetra Tech will email or call City personnel to confirm processes and procedures or collect information needed to support the plan update. Before the draft is provided to the City for review, it will undergo a technical and editorial review. The updated plan will be provided to the City for a two-week review period prior to the conduct of Workshop #2.

5.4 Emergency Response Plan Workshop #2 and Finalize ERP Update

The Tetra Tech team, including Tetra Tech OT Cybersecurity team, will conduct ERP Workshop #2 with the City virtually using webinar or video-conferencing platform. The purpose of the workshop will be to review the draft of the updated ERP, solicit input and feedback, and address areas where additional information is needed to update the plan. This meeting will last no longer than two hours, and four (4) Tetra Tech personnel will facilitate the meeting and take notes.

The Tetra Tech team will submit an agenda at least two business days in advance of the workshop and will develop a PowerPoint presentation to facilitate the conversation. Using the information collected during the workshop, the Tetra Tech team will develop an update of the ERP. The plan will be provided to the City for a two-week review and comment period. Tetra Tech will address one round of comments before considering the plan final. The plan will undergo a Quality Control and Formatting review prior to being submitted electronically to the City.

Deliverables:

- Workshop #1 agenda and meeting minutes
- Workshop #2 agenda
- Draft ERP
- Final ERP

Assumptions:

- Stakeholder Identification and Plan Review meeting is expected to require approximately one (1) hour and be virtual
- Deliverables will be submitted to the City in draft format, with comments and feedback required within two weeks or as specified in the scope above; upon incorporation of revisions, a final submission will be provided to the City, and the deliverables will be considered final and accepted
- Workshop #1 is expected to require approximately two (2) hours and be virtual
- Workshop #2 is expected to require approximately two (2) hours and be virtual
- The availability of Canton’s key personnel is critical to obtaining the information required for the overall success of this project. Information presented by the City’s key personnel will be accepted as factual, and no confirmation will be made.

3.0 TIMELINE AND SCHEDULE

A preliminary schedule is provided below

Deliverable	Due Date
Task 1: Project Management	
Project Award and Project Initiation	April 1, 2026
Kickoff Meeting	April 8, 2026
Task 2: Data Collection and Gap Analysis	
Initial Data Requests	April 8, 2026
Follow-up Data Calls	Ongoing
Task 3: Site Visits	

Deliverable	Due Date
Site Visits	April 27, 2026 – May 1, 2026
Task 4: Risk and Resilience Assessment	
PARRE Tool Input	Ongoing
RRA Workshop #1	May 13, 2026
RRA Workshop #2	May 27, 2026
Draft RRA Report Review and Comment	June 5, 2026
Draft RRA Report Review Meeting (if needed)	June 24, 2026
Final RRA Report	July 3, 2026
Task 5: Emergency Response Plan	
ERP Draft Development	Ongoing
Stakeholder Identification and Plan Review Meeting	June 17, 2026
ERP Workshop #1	July 1, 2026
ERP Workshop #2	July 22, 2026
Draft ERP Report Review and Comment	July 31, 2026
Final ERP Report	August 28, 2026

4.0 SUMMARY

The Time & Materials fee for the Scope of Services described above is \$112,484. Detailed pricing on a per task basis is provided in **Appendix A**. The project's expected duration is April 2026 to the end of August 2026.

APPENDIX A: PRICE PROPOSAL

 Price Proposal		Labor Plan												
City of Canton - AWIA RRA and ERP		(\$/hr)	\$185.00	\$208.00	\$112.00	\$280.00	\$118.00	\$112.00	Task Pricing Totals			\$112,484		
Submitted to: City of Canton (Attn: Bethany Watson, PE)									Specify Add'l Fees on Setup			\$0		
Contract Type: T&M									Technology Use Fee					
Project Phases / Tasks		Total Labor Hrs							Total Price			\$112,484		
									Pricing by Resource					
			Project Manager	Technical Lead (RRA & ERP)	Planner/Site Assessor	Senior Engineer - Cybersecurity	Project Engineer	Administrative Support	Labor	Subs	Travel	Mat'ls & Equip	ODCs	Task Pricing Totals
		753	66	64	492	57	40	34	\$105,114	-	\$7,370	-	-	\$112,484
Task 1 - Project Management		105	32	16	36	11	4	6	\$17,504	-	\$0	-	-	\$17,504
1.1 Project Initiation		20	4	4	8	4			\$3,588					\$3,588
1.2 Project Kick-Off		20	4	4	8	4			\$3,588					\$3,588
1.2 Monthly Progress Reports and Invoicing		16	8				2	6	\$2,388					\$2,388
1.3 Project Team Coordination		49	16	8	20	3	2		\$7,940					\$7,940
Task 2 - Data Collection and Gap Analysis		62	2	4	40	8	8	-	\$8,866	-	\$0	-	-	\$8,866
2.1 Data Collection and Gap Analysis		62	2	4	40	8	8		\$8,866					\$8,866
Task 3 - Site Visits		140	-	4	112	8	16	-	\$17,504	-	\$0	-	-	\$17,504
3.1 Site Visits		140		4	112	8	16		\$17,504					\$17,504
Task 4 - Risk and Resilience Assessment		229	18	22	154	15	6	14	\$31,630	-	\$0	-	-	\$31,630
4.1 Workshop #1 Asset Prioritization and Risk/Consequence Review		30	6	6	18				\$4,374					\$4,374
4.2 Workshop #2 Vulnerability, Threat, and Risk Analysis Workshop		22	4	3	15				\$3,044					\$3,044
4.3 Draft RRA Review Meeting		25	4	3	15	3			\$3,884					\$3,884
4.4 Draft RRA Development		99	2	5	73	8	4	7	\$13,082					\$13,082
4.5 Final RRA Development		53	2	5	33	4	2	7	\$7,246					\$7,246
Task 5 - Emergency Response Plan		217	14	18	150	15	6	14	\$29,610	-	\$0	-	-	\$29,610
5.1 Stakeholder Identification and Plan Review Meeting		18	2	2	14				\$2,354					\$2,354
5.2 Workshop #1 ERP		22	4	3	15				\$3,044					\$3,044
5.3 Workshop #2 ERP/Draft ERP Review		25	4	3	15	3			\$3,884					\$3,884
5.4 Draft ERP Development		99	2	5	73	8	4	7	\$13,082					\$13,082
5.5 Final ERP Development		53	2	5	33	4	2	7	\$7,246					\$7,246
Task 6 Travel		-	-	-	-	-	-	-	\$0	-	\$7,370	-	-	\$7,370
6.1 Travel		-									\$7,370			\$7,370
Totals		753	66	64	492	57	40	34	\$105,114	-	\$7,370	-	-	\$112,484