

CITY OF MARYSVILLE AGENDA BILL

EXECUTIVE SUMMARY FOR ACTION

CITY COUNCIL MEETING DATE: May 11, 2020

AGENDA ITEM:	
Risk and Resilience Assessment and Emergency Response Plan	
PREPARED BY:	DIRECTOR APPROVAL:
Karen Latimer, Utility Manager	
DEPARTMENT:	
Public Works – Water Division	
ATTACHMENTS:	
Professional Services Agreement	
BUDGET CODE:	AMOUNT:
40143410.541000	\$148,760.00
SUMMARY:	

On March 25, 2020, the City advertised a Request for Proposals, soliciting written proposals from qualified engineering firms to develop a Risk and Resilience Assessment and Emergency Response Plan (RRA & ERP) for the City’s water system in accordance with Section 2013 (a) and (b) of America’s Water Infrastructure Act of 2018 (AWIA). The City received proposals from nine (9) firms. A consultant selection committee reviewed and rated the proposals and selected RH2 Engineering, Inc. as the most qualified firm for the project.

The attached Professional Services Agreement (PSA) will provide the City with written RRA & ERP documents and certification to the U.S. Environmental Protection Agency that this work has been completed. It is staff’s opinion that the negotiated fee of \$148,760.00 is fair and consistent with industry standard.

RECOMMENDED ACTION: Staff recommends City Council authorize the Mayor to sign and execute a Professional Services Agreement with RH2 Engineering, Inc. in the amount of \$148,760.00 for preparation of a Risk and Resilience Assessment and Emergency Response Plan.
RECOMMENDED MOTION: I move to authorize the Mayor to sign and execute a Professional Services Agreement between City of Marysville and RH2 Engineering, Inc. in the amount of \$148,760.00.

**PROFESSIONAL SERVICES AGREEMENT BETWEEN
CITY OF MARYSVILLE
AND RH2 ENGINEERING, INC.**

THIS AGREEMENT (“Agreement”) is made and entered into as of the date of the last signature below, by and between the City of Marysville, a Washington State municipal corporation (“City”), and RH2 Engineering, Inc., a profit corporation licensed in the state of Washington, organized under the laws of the state of Washington, located and doing business at 22722 29th Drive SE, Suite 210, Bothell, WA 98021 (“Consultant”).

In consideration of the terms, conditions, covenants, and performances contained herein, the parties hereto agree as follows:

- 1. SCOPE OF SERVICES.** The Consultant shall provide the work and services described in the attached **EXHIBIT A**, incorporated herein by this reference (the “Services”). All services and materials necessary to accomplish the tasks outlined in the Scope of Services shall be provided by the Consultant unless noted otherwise in the Scope of Services or this Agreement. All such services shall be provided in accordance with the standards of the Consultant’s profession.
- 2. TERM.** The term of this Agreement shall commence on Notice to Proceed and shall terminate at midnight on June 30, 2021. The parties may extend the term of this Agreement by executing a written supplemental amendment.
- 3. COMPENSATION.** The Consultant shall be paid by the City for Services rendered under this Agreement as described in **EXHIBIT A** and as provided in this section. In no event shall the compensation paid to Consultant under this Agreement exceed **One Hundred Forty-Eight Thousand Seven Hundred Sixty Dollars and Zero Cents (\$148,760.00)** within the term of the Agreement, including extensions, without the written agreement of the Consultant and the City. Such payment shall be full compensation for the Services and for all labor, materials, supplies, equipment, incidentals, and any other expenses necessary for completion.

The Consultant shall submit a monthly invoice to the City for Services performed in the previous calendar month in a format acceptable to the City. The Consultant shall maintain time and expense records and provide them to the City upon request.

The City will pay timely submitted and approved invoices received before the 20th of each month within thirty (30) days of receipt.

4. CONSULTANT’S OBLIGATIONS.

4.1 MINOR CHANGES IN SCOPE. The Consultant agrees to accept minor changes, amendments, or revisions to the scope of the Services, as may be required by the City, when such

changes, amendments, or revisions will not have any impact on the cost of the Services or the proposed delivery schedule.

4.2 ADDITIONAL WORK. The City may desire to have the Consultant perform additional work or services which are not identified in the scope of the Services. If the parties agree to the performance of additional work or services, the parties will execute a written supplemental amendment detailing the additional work or services and compensation therefore. In no event will the Consultant be compensated for preparing proposals for additional work or services. In no event shall the Consultant begin work contemplated under a supplemental amendment until the supplemental amendment is fully executed by the parties.

4.3 WORK PRODUCT AND DOCUMENTS. The work product and all documents produced under this Agreement shall be furnished by the Consultant to the City, and upon completion of the Services shall become the property of the City, except that the Consultant may retain one copy of the work product and documents for its records. The Consultant will be responsible for the accuracy of the Services, the work product, and all documents produced under this Agreement, even though the Services have been accepted by the City.

In the event that the Consultant defaults on this Agreement or in the event that this Agreement is terminated prior to the completion of the Services or the time for completion, all work product and all documents and other materials produced under this Agreement, along with a summary of work as of the date of default or termination, shall become the property of the City. The summary of Services provided shall be prepared at no additional cost to the City. Upon request, the Consultant shall tender the work product, all documents, and the summary to the City within five (5) business days. Tender of said work product shall be a prerequisite to final payment under this Agreement.

The Consultant will not be held liable for reuse of work product or documents produced under this Agreement or modification of the work product or documents for any purpose other than those identified in this Agreement without the written authorization of the Consultant.

4.4 PUBLIC RECORDS ACT. Consultant acknowledges that the City is subject to the Public Records Act, chapter 42.56 RCW (the "PRA"). All records owned, used, or retained by the City are public records subject to disclosure unless exempt under the PRA, whether or not the records are in the possession or control of the City or Consultant. All exemptions to the PRA are narrowly construed.

a. **Confidential Information.** Any records provided to the City by the Consultant which contain information that the Consultant in good faith believes is not subject to disclosure under the PRA shall be marked "Confidential" and shall identify the specific information that the Consultant in good faith believes is not subject to disclosure under the PRA and a citation to the statutory basis for non-disclosure.

b. **Responding to Public Records Requests.** The City shall exercise its sole legal judgment in responding to public records requests.

- (1) The City may rely upon the lack of notification from the Consultant in releasing any records that are not marked “Confidential.”
- (2) If records identified as “Confidential” by the Consultant are responsive to a PRA request, the City will seek to provide notice to Consultant at least ten (10) business days before the date on which the City anticipates releasing records. The City is under no obligation to assert any applicable exemption on behalf of the Consultant. The Consultant may seek, at its sole cost, an injunction preventing the release of information which it believes is protected. In no event will the City have any liability to Consultant for any failure of the City to provide notice prior to release.
- (3) If the City, in its sole legal judgment, believes that the Consultant possesses records that (1) are responsive to a PRA request and (2) were used by the City, the City will request the records from the Consultant. The Consultant will, within ten (10) business days:
 - i. Provide the records to the City in the manner requested by the City;
 - ii. Obtain a court injunction, in a lawsuit involving the requester, covering all, or any confidential portion of, the records and provide any records not subject to the court injunction; or
 - iii. Provide an affidavit, in a form acceptable to the City Attorney, specifying that the Consultant has made a diligent search and did not locate any requested documents.

c. **Indemnification.** In addition to its other indemnification and defense obligations under this Agreement, the Consultant shall indemnify and defend the City from and against any and all losses, penalties, fines, claims, demands, expenses (including, but not limited to, attorneys fees and litigation expenses), suits, judgments, or damages (collectively “Damages”) arising from or relating to any request for records related to this Agreement, to the extent such Damages are caused by action or inaction of the Consultant. This indemnification and defense obligation shall survive the expiration or termination of this Agreement.

4.5 MAINTENANCE/INSPECTION OF RECORDS. The Consultant shall maintain all books, records, documents, and other evidence pertaining to the costs and expenses allowable under this Agreement in accordance with generally accepted accounting practices. All such books and records required to be maintained by this Agreement shall be subject to inspection and audit by representatives of the City and/or the Washington State Auditor at all reasonable times, and the Consultant shall afford the proper facilities for such inspection and audit.

Representatives of the City and/or the Washington State Auditor may copy such books, accounts, and records where necessary to conduct or document an audit. The Consultant shall preserve and make available all such books of account and records for a period of three (3) years after final payment under this Agreement. In the event that any audit or inspection identifies any discrepancy in such financial records, the Consultant shall provide the City with appropriate clarification and/or financial adjustments within thirty (30) calendar days of notification of the discrepancy.

4.6 INDEMNITY.

a. **Indemnification and Hold Harmless.** The Consultant shall defend, indemnify, and hold the City, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits including attorney fees, arising out of or resulting from the acts, errors, or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

b. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence.

c. The provisions of this Section 4.6 shall survive the expiration or termination of this Agreement.

d. The Consultant hereby knowingly, intentionally, and voluntarily waives the immunity of the Industrial Insurance Act, Title 51 RCW, solely for the purposes of the indemnity contained in subpart "a" of this Section 4.6. This waiver has been mutually negotiated by the parties.

_____ (City Initials) _____ (Contractor Initials)

4.7 INSURANCE.

a. **Insurance Term.** The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the Services hereunder by the Consultant, its agents, representatives, or employees.

b. **No Limitation.** Consultant's maintenance of insurance as required by the Agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

c. **Minimum Scope of Insurance.** Consultant shall obtain insurance of the types and coverage described below:

- (1) Automobile Liability insurance covering all owned, non-owned, hired, and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage.
- (2) Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the Services performed for the City using an additional insured endorsement at least as broad as ISO CG 20 26.
- (3) Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
- (4) Professional Liability insurance appropriate to the Consultant's profession.

d. **Minimum Amounts of Insurance.** Consultant shall maintain the following insurance limits:

- (1) Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
- (2) Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
- (3) Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

e. **Other Insurance Provision.** The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance as respect the City. Any Insurance, self-insurance, or self-insured pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

f. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

g. **Verification of Coverage.** The Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the Services.

h. **Notice of Cancellation.** The Consultant shall provide the City with written notice of any policy cancellation within two business days of the Consultant's receipt of such notice.

i. **Failure to Maintain Insurance.** Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five (5) business days notice to the Consultant to correct the breach, immediately terminate the Agreement or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

j. **Insurance to be Occurrence Basis.** Unless approved by the City all insurance policies shall be written on an "Occurrence" policy as opposed to a "Claims-made" policy. The City may require an extended reporting endorsement on any approved "Claims-made" policy. Professional liability insurance may be written on a "Claims-made" basis if it is maintained for a period of three (3) years following completion of the services.

k. **City Full Availability of Consultant Limits.** If the Consultant maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Consultant, irrespective of whether such limits maintained by the Consultant are greater than those required by this Agreement or whether any certificate of insurance furnished to the City evidences limits of liability lower than those maintained by the Consultant.

4.8 LEGAL RELATIONS. The Consultant shall comply with all federal, state, and local laws, regulations, and ordinances applicable to the Services to be performed under this Agreement. The Consultant represents that it and all employees assigned to perform any of the Services under this Agreement are in full compliance with the statutes of the State of Washington governing the Services and that all personnel to be assigned to the Services are fully qualified and properly licensed to perform the work to which they will be assigned.

4.9 INDEPENDENT CONTRACTOR.

a. The Consultant and the City understand and expressly agree that the Consultant is an independent contractor in the performance of each and every part of this Agreement. The Consultant expressly represents, warrants, and agrees that the Consultant's status as an independent contractor in the performance of the Services required under this Agreement is consistent with and meets the six-part independent contractor test set forth in RCW 51.08.195 or as hereafter amended. The Consultant, as an independent contractor, assumes the entire responsibility for carrying out and accomplishing the Services required under this Agreement. The Consultant shall not make

a claim of City employment and shall not claim any related employment benefits, social security, and/or retirement benefits.

b. The Consultant shall be solely responsible for paying all taxes, deductions, and assessments, including but not limited to federal income tax, FICA, social security tax, assessments for unemployment and industrial injury, and other deductions from income which may be required by law or assessed against either party as a result of this Agreement. In the event the City is assessed a tax or assessment as a result of this Agreement, the Consultant shall pay the same before it becomes due.

c. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work to the Services that the Consultant performs under this Agreement.

d. Prior to commencement of Services, the Consultant shall obtain a business license from the City.

4.10 EMPLOYMENT.

a. The term “employee” or “employees” as used herein shall mean any officers, agents, or employee of the Consultant.

b. Any and all employees of the Consultant, while performing any Services under this Agreement, shall be considered employees of the Consultant only and not of the City. The Consultant shall be solely liable for: (1) and any and all claims that may or might arise under the Workman’s Compensation Act, Title 51 RCW, on behalf of any said employees while performing any Services under this Agreement, and (2) any and all claims made by any third party as a consequence of any negligent act or omission on the part of the Consultant or its employees while performing any Services under this Agreement.

c. The Consultant represents, unless otherwise indicated below, that all employees of the Consultant that will perform any Services under this Agreement have never been retired from a Washington State retirement system, including but not limited to Teacher (TRS), School District (SERS), Public Employee (PERS), Public Safety (PSERS), law enforcement and fire fighters (LEOFF), Washington State Patrol (WSPRS), Judicial Retirement System (JRS), or otherwise. *(Please use initials to indicate No or Yes below.)*

_____ No, employees performing the Services have never been retired from a Washington state retirement system.

_____ Yes, employees performing the Services have been retired from a Washington state retirement system.

In the event the Consultant checks “no”, but an employee in fact was a retiree of a Washington State retirement system, and because of the misrepresentation the City is required to defend a claim by the Washington State retirement system, or to make contributions for or on account of the employee, or reimbursement to the Washington State retirement system for benefits paid, the Consultant hereby agrees to save, indemnify, defend and hold the City harmless from and against all expenses and costs, including reasonable attorney fees incurred in defending the claim of the Washington State retirement system and from all contributions paid or required to be paid, and for all reimbursement required to the Washington State retirement system. In the event the Consultant checks “yes” and affirms that an employee providing work has ever retired from a Washington State retirement system, every said employee shall be identified by the Consultant and such retirees shall provide the City with all information required by the City to report the employment with Consultant to the Department of Retirement Services of the State of Washington.

4.11 NONASSIGNABLE. Except as provided in **EXHIBIT B**, the Services to be provided by the Consultant shall not be assigned or subcontracted without the express written consent of the City.

4.12 SUBCONTRACTORS AND SUBCONSULTANTS.

a. The Consultant is responsible for all work or services performed by subcontractors or subconsultants pursuant to the terms of this Agreement.

b. The Consultant must verify that any subcontractors or subconsultants the Consultant directly hires meet the responsibility criteria for the Services. Verification that a subcontractor or subconsultant has proper license and bonding, if required by statute, must be included in the verification process. If the parties anticipate the use of subcontractors or subconsultants, the subcontractors or subconsultants are set forth in **EXHIBIT B**.

c. The Consultant may not substitute or add subcontractors or subconsultants without the written approval of the City.

d. All subcontractors or subconsultants shall have the same insurance coverage and limits as set forth in this Agreement and the Consultant shall provide verification of said insurance coverage.

4.13 CONFLICTS OF INTEREST. The Consultant agrees to and shall notify the City of any potential conflicts of interest in Consultant’s client base and shall obtain written permission from the City prior to providing services to third parties when a conflict or potential conflict of interest exists. If the City determines in its sole discretion that a conflict is irreconcilable, the City reserves the right to terminate this Agreement.

4.14 CITY CONFIDENCES. The Consultant agrees to and will keep in strict confidence, and will not disclose, communicate, or advertise to third parties without specific prior written consent from the City in each instance, the confidences of the City or any information regarding the City or the Services provided to the City.

4.15 DISCRIMINATION PROHIBITED AND COMPLIANCE WITH EQUAL OPPORTUNITY LEGISLATION. The Consultant agrees to comply with equal opportunity employment and not to discriminate against any client, employee, or applicant for employment or for services because of race, creed, color, religion, national origin, marital status, sex, sexual orientation, age, or handicap except for a bona fide occupational qualification with regard, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or any recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; selection for training; or rendition of services. The Consultant further agrees to maintain (as appropriate) notices, posted in conspicuous places, setting forth its nondiscrimination obligations. The Consultant understands and agrees that if it violates this nondiscrimination provision, this Agreement may be terminated by the City, and further that the Consultant will be barred from performing any services for the City now or in the future, unless a showing is made satisfactory to the City that discriminatory practices have been terminated and that recurrence of such action is unlikely.

4.16 UNFAIR EMPLOYMENT PRACTICES. During the performance of this Agreement, the Consultant agrees to comply with RCW 49.60.180, prohibiting unfair employment practices.

5. CITY APPROVAL REQUIRED. Notwithstanding the Consultant's status as an independent contractor, the Services performed pursuant to this Agreement must meet the approval of the City, which shall not be unreasonably withheld if the Services have been completed in compliance with the Scope of Services and City requirements.

6. GENERAL TERMS.

6.1 NOTICES. Receipt of any notice shall be deemed effective three (3) calendar days after deposit of written notice in the U.S. mail with proper postage and address.

Notices to the City shall be sent to the following address:

CITY OF MARYSVILLE
Karen Latimer, Utility Manager
80 Columbia Avenue
Marysville, WA 98270

Notices to the Consultant shall be sent to the following address:

RH2 ENGINEERING, INC.

Michele Campbell, P.E., Associate Director

22722 29th Drive SE, Suite 210

Bothell, WA 98021

6.2 TERMINATION. The City may terminate this Agreement in whole or in part at any time by sending written notice to the Consultant. As per Section 6.1, the Consultant is deemed to have received the termination notice three (3) calendar days after deposit of the termination notice in the U.S. mail with proper postage and address. The termination notice is deemed effective seven (7) calendar days after it is deemed received by the Consultant.

If this Agreement is terminated by the City for its convenience, the City shall pay the Consultant for satisfactory Services performed through the date on which the termination is deemed effective in accordance with payment provisions of Section 3, unless otherwise specified in the termination notice. If the termination notice provides that the Consultant will not be compensated for Services performed after the termination notice is received, the City will have the discretion to reject payment for any Services performed after the date the termination notice is deemed received.

6.3 DISPUTES. The parties agree that, following reasonable attempts at negotiation and compromise, any unresolved dispute arising under this Agreement may be resolved by a mutually agreed-upon alternative dispute resolution of arbitration or mediation.

6.4 EXTENT OF AGREEMENT/MODIFICATION. This Agreement, together with exhibits, attachments, and addenda, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended, modified, or added to only by a written supplemental amendment properly signed by both parties.

6.5 SEVERABILITY.

a. If a court of competent jurisdiction holds any part, term, or provision of this Agreement to be illegal or invalid, in whole or in part, the validity of the remaining parts, terms, or provisions shall not be affected, and the parties' rights and obligations shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.

b. If any part, term, or provision of this Agreement is in direct conflict with any statutory provision of the State of Washington, that part, term, or provision shall be deemed inoperative and null and void insofar as it may conflict, and shall be deemed modified to conform to such statutory provision.

6.6 NONWAIVER. A waiver by either party of a breach by the other party of any covenant or condition of this Agreement shall not impair the right of the party not in default to avail itself of any subsequent breach thereof. Leniency, delay, or failure of either party to insist upon strict performance of any agreement, covenant, or condition of this Agreement, or to exercise any right herein given in any one or more instances, shall not be construed as a waiver or relinquishment of any such agreement, covenant, condition, or right.

6.7 FAIR MEANING. The terms of this Agreement shall be given their fair meaning and shall not be construed in favor of or against either party hereto because of authorship. This Agreement shall be deemed to have been drafted by both of the parties.

6.8 GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington.

6.9 VENUE. The venue for any action to enforce or interpret this Agreement shall lie in the Superior Court of Washington for Snohomish County, Washington.

6.10 COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Agreement.

6.11 AUTHORITY TO BIND PARTIES AND ENTER INTO AGREEMENT. The undersigned represent that they have full authority to enter into this Agreement and to bind the parties for and on behalf of the legal entities set forth herein.

DATED this _____ day of _____, 2020.

CITY OF MARYSVILLE

By _____
Jon Nehring, Mayor

DATED this _____ day of _____, 2020.

RH2 ENGINEERING, INC.

By _____
Richard L. Ballard
Its: Director

ATTEST/AUTHENTICATED:

_____, Deputy City Clerk

Approved as to form:

Jon Walker, City Attorney

EXHIBIT A
Scope of Services

EXHIBIT B

Subcontractors/Subconsultants

Below is a list of approved subcontractors/subconsultants. If left blank, there are no approved subcontractors or subconsultants.

EXHIBIT A
Scope of Work
City of Marysville
America's Water Infrastructure Act
Risk and Resilience Assessment and Emergency Response Plan
April 2020

Background

The City of Marysville (City) has selected RH2 Engineering Inc., (RH2) to assist with preparation of a Risk and Resilience Assessment (RRA) and Emergency Response Plan (ERP) as required under the 2018 America's Water Infrastructure Act (AWIA). The water system must certify compliance with RRA and ERP requirements on a schedule dependent on system size. Recertification will be required every 5 years.

Since the City's service population is between 50,000 and 99,999, the U.S. Environmental Protection Agency (EPA) mandated RRA deadline is December 31, 2020. This project is targeting:

- RRA completion on December 15, 2020; and
- RRA certification on December 31, 2020.

ERP certification is due within 6 months of RRA certification; therefore, it is due June 30, 2021. This project is targeting:

- ERP completion on May 31, 2021; and
- ERP certification on June 15, 2021.

The RRA and ERP includes the review and development of sensitive information. RH2 will work closely with the City to securely transmit files and information and will restrict file access of sensitive information where required by the City.

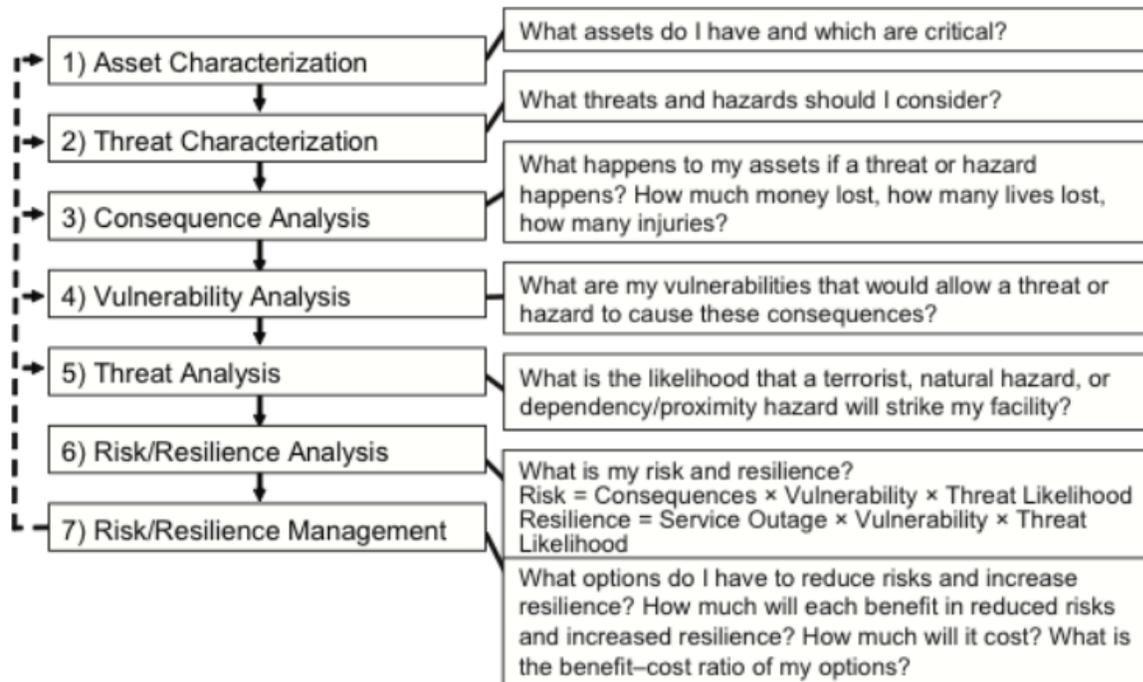
Risk and Resilience Assessment (RRA)

The RRA will include an assessment of the water system assets and an all-hazard approach to threats, including the following:

1. The risk to the system from malevolent acts and natural hazards;
2. The resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
3. The monitoring practices of the system;
4. The financial infrastructure of the system;
5. The use, storage, or handling of various chemicals by the system; and
6. The operation and maintenance of the system.

The assessment also may include an evaluation of capital and operational needs for risk and resilience management for the system.

RH2 will follow the standards outlined in American Water Works Association/American National Standards Institute (AWWA/ANSI) J100-10 R13 *Risk and Resilience Management of Water and Wastewater Systems* (J100) when performing the RRA. J100 outlines a seven step Risk Analysis and Management for Critical Asset Protection (RAMCAP) process, as illustrated in the figure that follows.



Emergency Response Plan (ERP)

The findings of the RRA are to be incorporated in the ERP update. The updated ERP must include the following:

1. Strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;
2. Plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
3. Actions, procedures, and equipment that can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes, and construction of flood protection barriers;
4. Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system;
5. Examination of financial infrastructure;

6. Addressing the use, storage, or handling of chemicals; and
7. Consideration of operations, maintenance, and asset management.

The physical arrangement of the ERP will allow easy access to incident-specific procedures for “rip-and-run” style use. The ERP will generally include the required elements and will be organized in a manner and order similar to the EPA’s 2019 *Community Water System Emergency Response Plan Template*.

General Assumptions

In preparing this Scope of Work, the following overall assumptions were made. Additional assumptions are listed within the tasks.

- *The City has the institutional knowledge of its water system, and the City must respond quickly to information requests, involve the correct staff, perform timely and thorough reviews of draft documents, and be actively involved in the RRA and ERP development in order to meet the EPA deadlines. RH2’s role is to support the City’s efforts through collection and organization of relevant information and presentation in a way that allows City decision makers to quickly make informed decisions at key points in the RRA and ERP development.*
- *RRA and ERP documents will be limited to the water system. Impacts of other utility failures will be analyzed (to the extent that their failure impacts the water system) and response coordination planned, but analysis and planning for other utilities (such as wastewater) are outside the scope of this project.*
- *Analysis will include applicable business systems. Applicable business systems are assumed to include those systems and IT directly affecting water operations, such as maintenance and communication systems, as well as financial infrastructure such as accounting, purchasing, billing systems, or third parties used for these services.*
- *Project documents will be provided in electronic format to the extent possible. Deliverables will be provided in PDF format.*
- *Restrictions to in-person meetings and workshops due to COVID-19 will not impact the schedule and are assumed to continue through the end of 2020. All meetings can be held via videoconference using either RingCentral or Microsoft Teams platforms. If in-person meetings are necessary, all participants will adhere to health guidelines for in-person activities in order to protect the health of RH2 and City staff. RH2 staff have visited most facilities in the past and it is assumed that specific questions about certain facilities can be documented by City staff and relayed to RH2.*
- *Workshops will generally be limited to four (4) hours in duration and will be held at the City’s offices or remotely via videoconference (RingCentral or Microsoft Teams).*
- *Infrastructure cost estimates will be Association for the Advancement of Cost Engineering (AACE) Class 5 (conceptual level).*

- *RH2 will rely on the accuracy and completeness of any data, information, survey, or materials generated or provided by the City, or others in relation to this Scope of Work.*
- *The City will provide timely feedback on deliverables identified in this Scope of Work.*
- *RRA information may be compiled and processed in AEM Engineering's PARRE™ software. The project budget includes an allowance of \$500 to cover the cost of purchasing one (1) license of the PARRE software. The license, along with all data, will be transferred to the City following completion of the work for City use in future RRA efforts. The City will be responsible for maintenance of the license for future RRA efforts.*

Tasks

The following task descriptions provide details regarding the objective, approach, additional assumptions, items to be provided by the City, and deliverables of RH2.

Task 1 – Project Management Services

Objective: Manage RH2's project team, maintain communications, including phone calls and emails, and attend coordination meetings.

Approach:

1.1 Perform Project Management: Provide direction, coordination, and oversight to the RH2 project team. Work includes the following:

- Organize, manage, and coordinate technical disciplines as described herein, and implement quality assurance and quality control (QA/QC) to perform this Scope of Work in close coordination with City staff.
- Document and retain information generated by the RH2 team during execution of the project.
- Prepare monthly invoices and budget status summaries.
- Create, maintain, and update an internal project schedule. Monitor, modify, and update the project schedule periodically throughout the project to determine potential impacts of proposed changes. Adjust the schedule to reflect the current status of the project and revisions made to this Scope of Work.

1.2 Attend Coordination Meetings: Prepare for and attend (in-person or via video conference) coordination meetings with City staff, as requested. Prepare agenda and meeting minutes. *A total of six (6) meetings are assumed for this Scope of Work, in addition to the other workshop meetings identified elsewhere in this Scope of Work.*

RH2 Deliverables:

- Monthly invoices.
- Meeting agendas and minutes.

- Periodic project updates.

Task 2 – Project Kickoff

Objective: Streamline communication between the City and RH2. Identify available existing resources. Lay the groundwork for identifying which assets are critical assets and tour primary facilities.

Approach:

2.1 Establish Primary Points of Contact: Work with the City to identify primary points of contact for RH2 and within the City’s organization related to different aspects of the system, including:

- Management;
- Operations;
- Engineering;
- Electrical;
- IT/Supervisory Control and Data Acquisition (SCADA);
- Administrative/Billing; and
- Physical Security

2.2 Obtain and Review Background Information: Provide the City with initial AWIA Information Request Form. Obtain and organize background information identified in information request form. Review information to assess whether information is relatively sufficient, complete, and up to date. Update information request form and coordinate with the City to obtain or update information as needed. Prepare bibliography of data obtained.

2.3 Identify Critical Thresholds: Coordinate with the City to review the organization’s mission statement and translate the mission statement into terms that will help determine criticality of assets during an emergency, such as:

- Fire flow (gallons per minute at hydrants);
- Water system pressure (pounds per square inch in distribution system);
- Water quality (specific);
- Water treatment (specific);
- Service disruption length (hours or days);
- Critical customer need requirements (specific); and
- Other.

2.4 Coordinate Field Investigations: Work with the City staff to identify water system assets about which RH2 needs more information, or which are known to be susceptible to threats. *To maintain social distancing, it is assumed that City staff will visit and photo document facilities to obtain additional information required by RH2 to carry out this assessment.*

Provided by City:

- Existing information as identified on the AWIA information request form.
- Decision on critical thresholds.
- Guided tour of primary facilities.

RH2 Deliverables:

- AWIA information request form.
- Bibliography of data.
- Summary of critical thresholds.

Task 3 – Threat and Asset Characterization and Creation of Threat-Asset Pairs

Objective: Identify City water system assets and threats. Eliminate non-critical assets and non-feasible threats. Create Threat-Asset (T-A) Pairs for analysis in more detail in future tasks. The purpose of this Task is to narrow the number of assets, threats, and T-A pairs from a comprehensive list to a limited list of the top T-A pairs based on consequence. *For budgeting and planning purposes, it is assumed that this process will begin with a maximum of 500 water system T-A pairs. These T-A pairs then will be ranked and reduced to a top 100 list of T-A pairs for full analysis.*

Approach:

3.1 Identify and Characterize Assets: Work with the City and use the available documents and threshold criteria to create an initial asset table and chapter of the RRA Report.

- Use threshold criteria to identify critical assets and to eliminate non-critical assets from further consideration.
- Document why assets are critical.
- Organize and prepare tables and Assets chapter of RRA Report.

3.2 Identify and Characterize Threats: Work with the City and other resources to identify and characterize natural hazards, malevolent threats, and dependency/proximity threats.

- Document which threats are likely and deserve additional consideration and which are highly unlikely to this system and area and should be eliminated from further consideration.
- Organize and prepare Threats chapter of RRA Report.

3.3 Create T-A Pairs: Pair threats and assets for further analysis.

- Create table of T-A pairs.

3.4 Develop Consequence Rating Criteria for Preliminary Screening: Work with the City to identify and document numerical consequence rating criteria that can be used for preliminary screening of the T-A pairs. Consequence categories will include the following:

- Fatalities;
- Serious Injuries;
- Utility economic loss;
- Regional economic loss;
- Environmental impacts;
- Public confidence;
- Service denial (hours or days); and
- Other.

Document the criteria and apply the consequence rating criteria to the T-A pairs and rank them in a table. Organize and prepare Consequence Rating Criteria chapter of RRA Report.

3.5 Reduce the Number of T-A Pairs: Work with City staff in a workshop to reduce the number of T-A pairs to no more than 100. The number of T-A pairs will be reduced based upon:

- T-A pairs that can be grouped based on similar assets facing the same threats with similar consequences;
- Bottom-cutting of lower consequence T-A pairs; and
- Professional judgement.

Provided by City:

- Assistance on initial asset identification.
- Review of initial asset table.
- Review of Asset chapter of RRA Report.
- Review of Threats chapter of RRA Report.
- Review of T-A pairs table.
- Agreement upon consequence rating criteria for preliminary screening.
- Review of Consequence Rating Criteria chapter of RRA Report.
- Participation in the T-A pairs workshop.

RH2 Deliverables:

- Initial asset table.
- Critical asset table.
- Assets chapter of RRA Report (electronic form only).
- Threats chapter of RRA Report (electronic form only).
- Table of initial T-A pairs.
- Table of initial T-A pairs containing preliminary screening consequence criteria.

- Consequence Rating Criteria chapter of RRA Report (electronic form only).
- Table of T-A pairs to be analyzed for baseline risk and resilience.

Task 4 – Calculate Baseline Risk and Resilience

Objective: Identify, calculate, and document values for consequence cost, vulnerability, and threat likelihood that will allow for calculation of baseline risk for each T-A pair. Consider the cost of service denial to calculate the resilience of each T-A pair.

Approach:

- 4.1 Evaluate and Summarize Consequence Costs: Estimate the planning-level costs if a threat is realized against an asset. Organize and prepare Consequence chapter of RRA Report.
- 4.2 Evaluate and Summarize Vulnerability: Calculate the probability (0 = not vulnerable; 1 = highly vulnerable) that the asset will fail if the paired threat occurs using methods such as available data, event trees, path analysis, vulnerability logic diagrams, historical knowledge, and interviews with suppliers. Organize and prepare Vulnerability chapter of RRA Report.
- 4.3 Evaluate Threat Likelihood: Utilize available sources of information to calculate the likelihood of a threat occurring in any given year (1 = certain; 10^{-10} = highly unlikely) for each T-A pair. Organize and prepare Threat Likelihood chapter of RRA Report.
- 4.4 Calculate Baseline Risk of Each T-A Pair: Calculate baseline risk (\$ per year) for each T-A pair.
 - Multiply the values of Consequence, Vulnerability, and Threat Likelihood developed in this Task.
- 4.5 Calculate Baseline Resilience of Each T-A Pair: Calculate the baseline resilience (\$ per year) for each T-A pair.
 - Multiply the cost to the City (duration in days multiplied by lost revenue per day) by the vulnerability and threat likelihood. Use the values for vulnerability and threat likelihood as developed in this Task.

Provided by City:

- Review of Consequence chapter of RRA Report.
- Review of Vulnerability chapter of RRA Report.
- Review of Threat Likelihood chapter of RRA Report.
- Review of table of T-A pairs showing values for variables and calculated baseline risk and resilience.

RH2 Deliverables:

- Consequence chapter of RRA Report (electronic form only).
- Vulnerability chapter of RRA Report (electronic form only).
- Threat Likelihood chapter of RRA Report (electronic form only).

- Table of T-A pairs showing values for variables and calculated baseline risk and resilience.

Task 5 – Risk and Resilience Management

Objective: Identify potential mitigation measures to reduce the risk and/or increase the resilience of T-A pairs and the system as a whole.

Approach:

- 5.1 Identify Potential Mitigation Measures: Attend a workshop with City staff to brainstorm up to 25 potential mitigation measures to reduce the risk of T-A pairs.
- 5.2 Develop Live-Cycle Cost Estimates for Potential Mitigation Measures: Prepare planning-level costs covering both capital and operations and maintenance costs of the potential mitigation measures.
- 5.3 Calculate Mitigated Risk: Recalculate risk based on revised consequence, vulnerability, and threat likelihood values based on the potential mitigation measure being carried out.
- 5.4 Calculate Benefits of Potential Mitigation Measures: For T-A pairs with reduced risk due to mitigation measures, calculate the following:
 - Gross Benefit = Baseline Risk – Mitigation Risk.
 - Net Benefit = Gross Benefit – Mitigation Measure Cost.
 - Benefit/Cost Ratio = Net Benefit/Mitigation Measure Cost.
 - Identify Timeline of Mitigation: Short (immediately), mid-term (1 to 5 years), or long-term (greater than 5 years).
- 5.5 Select Mitigation Measures: Assist the City with determining and prioritizing which potential mitigation measures to include in a prioritized implementation plan. Organize and prepare Risk and Resilience Management chapter of RRA Report.

Provided by City:

- Participate in mitigation measures workshop.
- Decide and prioritize which mitigation measures to implement.
- Review Risk and Resilience Management chapter of RRA Report.

RH2 Deliverables:

- Table of T-A pairs showing benefit and potential mitigated risk calculations.
- Risk and Resilience Management chapter, including prioritized implementation plan (electronic form only).

Task 6 – Finalize RRA

Objective: Finalize RRA and prepare certification letter for the City’s submittal to EPA.

Approach:

- 6.1 Finalize RRA: Incorporate all chapters and tables previously prepared into a single RRA report. Prepare an executive summary, cover, table of contents, and redacted prioritized implementation plan. Provide to City for review. Prepare final report based on City comments.
- 6.2 Facilitate City Certification of RRA: Prepare certification letter and assist City in completing certification process.

Provided by City:

- Review of complete RRA Report.
- Completing and submitting certification letter to EPA.

RH2 Deliverables:

- Final RRA Report (electronic form only).
- Certification letter for submittal by City (electronic form only).

Task 7 – Emergency Response Plan Update

Objective: Prepare a simple and flexible ERP update that incorporates the work of the RRA and addresses new requirements under the AWIA.

Approach:

- 7.1 Review Existing ERP: Review existing ERP. *It is assumed that the City has an existing ERP.*
- 7.2 Conduct Existing ERP Gap Analysis: Compare findings from RRA and requirements of the AWIA to the existing ERP and identify any gaps.
- 7.3 Identify Proposed Updates to the ERP: Identify sections of the ERP proposed to be updated and discuss proposed updates with the City to determine which to undertake. Include coordination so that this ERP update is consistent with the City-wide ERP currently under preparation by the City. Document the findings of Subtasks 7.2 and 7.3 in a technical memorandum.
- 7.4 Prepare Initial Draft ERP: Draft the updated ERP to comply with AWIA requirements. Obtain City comments on the initial draft and prepare an updated draft document.
- 7.5 Facilitate ERP Training Workshop and Tabletop Exercise: Participate in an ERP workshop to be conducted at the City’s facilities. *It is assumed the workshop will be four (4) hours in duration and the tabletop exercise will also be four (4) hours in duration. The tabletop exercise will be able to be held in person since it will be held in approximately April 2021.* Facilitate tabletop testing of ERP as follows:
 - Participate in a workshop to introduce City staff to the ERP.
 - Identify one (1) emergency scenario that will be run during the tabletop exercise.

- Facilitate tabletop exercise to test the ERP.
- Discuss the ERP and the exercise results with participants and identify any needed ERP adjustments.

7.6 Finalize ERP: Based on feedback received during Subtask 7.5, prepare final ERP and submit to the City.

7.7 Facilitate City Certification of ERP: Prepare certification letter and assist City in completing certification process. *The City will submit certification documentation to the EPA.*

Provided by City:

- Existing ERP.
- Review of ERP Gap Analysis and Proposed Updates technical memorandum.
- Review and comment on initial draft ERP.
- Meeting space and arranging for participation of necessary staff to perform an ERP training workshop and tabletop exercise.
- Guidance on updates to make to draft ERP based on the workshop and tabletop exercise result.
- Review of final ERP.
- Submittal of certification to EPA.

RH2 Deliverables:

- ERP Gap Analysis and Proposed Updates technical memorandum (electronic form only).
- Initial Draft ERP (electronic form only).
- Draft ERP (electronic form only).
- Training workshop and tabletop exercise facilitation.
- Final ERP (electronic form only).
- ERP certification document (electronic form only).

EXHIBIT B

Fee Estimate

City of Marysville

America's Water Infrastructure Act

Risk and Resilience Assessment and Emergency Response Plan

Apr-20

Description		Total Hours	Total Labor	Total Expense	Total Cost
Task 1	Project Management Services	50	\$ 10,520	\$ 273	\$ 10,793
Task 2	Project Kickoff	36	\$ 7,766	\$ 367	\$ 8,133
Task 3	Threat and Asset Characterization and Creation of Threat-Asset Pairs	152	\$ 31,638	\$ 1,624	\$ 33,262
Task 4	Calculate Baseline Risk and Resilience	108	\$ 21,468	\$ 1,343	\$ 22,811
Task 5	Risk and Resilience Management	134	\$ 28,406	\$ 1,179	\$ 29,585
Task 6	Finalize RRA	37	\$ 7,534	\$ 216	\$ 7,750
Task 7	Emergency Response Plan Update	174	\$ 35,146	\$ 1,281	\$ 36,427
PROJECT TOTAL		691	\$ 142,478	\$ 6,282	\$ 148,760

EXHIBIT C
RH2 ENGINEERING, INC.
2020 SCHEDULE OF RATES AND CHARGES

RATE LIST	RATE	UNIT
Professional I	\$149	\$/hr
Professional II	\$163	\$/hr
Professional III	\$179	\$/hr
Professional IV	\$191	\$/hr
Professional V	\$206	\$/hr
Professional VI	\$219	\$/hr
Professional VII	\$238	\$/hr
Professional VIII	\$244	\$/hr
Professional IX	\$244	\$/hr
Control Specialist I	\$135	\$/hr
Control Specialist II	\$147	\$/hr
Control Specialist III	\$161	\$/hr
Control Specialist IV	\$174	\$/hr
Control Specialist V	\$185	\$/hr
Control Specialist VI	\$198	\$/hr
Control Specialist VII	\$214	\$/hr
Control Specialist VIII	\$222	\$/hr
Technician I	\$112	\$/hr
Technician II	\$122	\$/hr
Technician III	\$139	\$/hr
Technician IV	\$150	\$/hr
Technician V	\$163	\$/hr
Technician VI	\$179	\$/hr
Technician VII	\$194	\$/hr
Technician VIII	\$204	\$/hr
Administrative I	\$74	\$/hr
Administrative II	\$86	\$/hr
Administrative III	\$103	\$/hr
Administrative IV	\$122	\$/hr
Administrative V	\$140	\$/hr
CAD/GIS System	\$27.50	\$/hr
CAD Plots - Half Size	\$2.50	price per plot
CAD Plots - Full Size	\$10.00	price per plot
CAD Plots - Large	\$25.00	price per plot
Copies (bw) 8.5" X 11"	\$0.09	price per copy
Copies (bw) 8.5" X 14"	\$0.14	price per copy
Copies (bw) 11" X 17"	\$0.20	price per copy
Copies (color) 8.5" X 11"	\$0.90	price per copy
Copies (color) 8.5" X 14"	\$1.20	price per copy
Copies (color) 11" X 17"	\$2.00	price per copy
Technology Charge	2.50%	% of Direct Labor
Mileage	\$0.575	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	