Exhibit A - Services

AECOM's approach to the water system master plan is best explained by describing the tasks to be performed in support of the project. The following provides a detailed description of the services to be provided by AECOM.

Phase 1: Water System Master Plan - Hydraulic Model Update and Calibration

Task	Description
1	Review Existing Model and Project Management Plan
2	Model Update
3	Field Tests
4	Model Calibration

Phase 2: Water System Master Plan - Water System Evaluation and Projections

Task	Description
1	Population and Community Growth Projections
2	Water Requirements
3	Existing Water System Facilities
4	Existing and Future Water Supply and Storage Evaluation
5	Water System Evaluation
6	Reporting

Phase 3: Water System Master Plan – Improvement and Capital Improvement Planning

Task	Description
1	Operational Improvements
2	Water System Improvement Planning
3	20-Year Capital Improvements Plan Development
4	Reporting

Water System Master Plan Optional Tasks

Task	Description
1	Water Main Replacement Rate Analysis
2	Water Main Replacement Prioritization Analysis
3	Leak and Break Analysis
4	Water Loss Evaluation

Phase 4: AWIA Risk and Resilience/Emergency Response Plan

Task	Description
1	Risk and Resilience Assessment (RRA)
2	Emergency Response Plan (ERP)

AWIA Risk and Resilience/Emergency Response Plan Optional Tasks

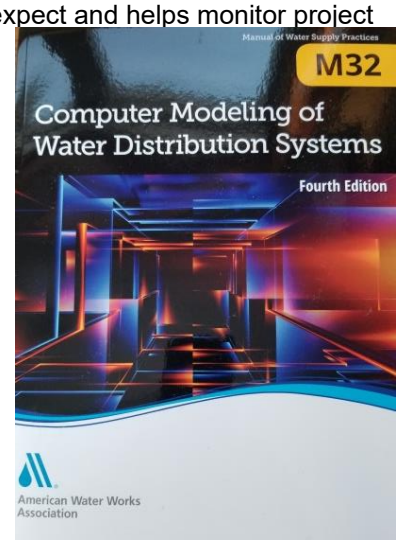
Task	Description
1	Meeting Minutes
2	Spreadsheet Calculations and Updates
3	Cost Estimating

Phase 1: Water System Master Plan – Hydraulic Model Update and Calibration

Task 1: Review Existing Model and Project Management Planning

Understanding and meeting client requirements is the foundation for AECOM's quality through teamwork philosophy. The primary goals of the project planning component are to clearly define your requirements and expectations in terms of deliverables, project schedule, and budget; and to manage the project to meet those requirements. Communication is the key to this process and an important tool to facilitate this communication is the project management plan.

A project management plan will be prepared during project initiation. To develop the project management plan, key team members will complete an initial review of available information obtained from the City including the existing hydraulic model. Following the review, AECOM will discuss the findings and proposed plan with the City. rom this discussion, an approach will be finalized, including agreeing on required deliverables and milestones. An approach focusing on specific deliverables helps everyone understand what to expect and helps monitor project progress. The project management plan will also clearly define individual team member responsibilities, including those team members from the City departments and others who may participate in the project. The project management plan sets out the road map for the project, but it is important for ongoing communication to occur throughout the duration of the project.



The purpose of this task is to understand the system, the current model, and the clearly define the requirements, expectations, and schedule as part of a project management plan to meet those requirements.

For this task, AECOM will provide the following services:

1. Prepare a project management plan that will identify team member responsibilities, lines of communication, schedule, and key milestones. The draft project plan and schedule will be submitted to the City for review and approval.
2. Review existing model and available water system data from City.
3. Prepare a data needs list.
4. Conduct a project kick-off meeting with key representatives of the City and AECOM and discuss the project management plan and information needed to complete the project.
5. Prepare a quality control/quality assurance plan.
6. Prepare a meeting schedule for project team members and City staff to review progress and project schedule.
7. Coordinate monthly conference calls to discuss status of project and any challenges.
8. Provide monthly written progress reports summarizing the status of project tasks and planned activities.

Deliverables

- Data needs request.
- Meeting agendas and minutes of meetings.
- Monthly progress reports.
- Draft and final project management plan.
- Project schedule.
- Quality control/quality assurance plan.

Task 2: Model Update

The City currently has an existing hydraulic water system model and GIS mapping of the existing distribution system. AECOM will work with City staff to obtain the information on the water system that is needed to update the existing hydraulic model.

For this task, AECOM will provide the following services:

1. Discuss modeling software options with City staff, which are compatible with GIS and help the City make a decision on which software should be used for the project.
2. Update existing water system model to ensure that it accurately represents the existing water system, including model pipes, elevations, pressure zones and closed valves.
3. Update water system facilities, such as pump stations, wells, and storage tanks, in the hydraulic model based on available information from City, as necessary.
4. Assign water demands to model junction nodes using automatic routines to link billing data and meter consumption to demand nodes in the model.
5. Automatically transfer ground elevations from available GIS contours or digital terrain models to the hydraulic model.
6. Modify control strategy in the hydraulic model based on current operating procedures based on discussions with the City.

AECOM is a strong believer in using continuous pressure monitoring devices for model calibration and the Stevens Point office owns 36 pressure monitoring devices.

Task 3: Field Tests

The purpose of field testing is to provide information on pressures, flows, and operating characteristics of the system that will be used to assist AECOM with calibration of the hydraulic model.

The following tests are proposed as part of the study:

- Extended period pressure monitoring at key locations throughout the water distribution system (macro approach).
- Flow and pressure tests at fire hydrants (micro approach).
- C-factor tests.

AECOM owns all the equipment needed to perform these field tests, and AECOM's engineers are trained and experienced in performing these types of tests for utilities.

For this task, AECOM will provide the following services:

1. Prepare a field test work plan that will identify the following:
   a. Test location.
   b. Purpose of test.
   c. Information to be collected at the test site and other monitoring locations.
   d. Forms for recording test information.
   e. Field testing schedule.
2. Submit field testing work plan to City staff for discussion and agreement prior to performing the field tests and finalize the work plan based on comments from City staff.
3. Perform a minimum of 5 c-factor tests.
4. Perform a minimum of 20 flow and pressure tests.
5. Identify locations for installation of 24 to 36 continuous pressure monitoring devices for installation.
   a. During the flow testing period, the continuous pressure monitors will provide additional data locations to improve model calibration.
   b. The devices will remain in the system for approximately 1 week to collect data every 15 seconds for macro calibration.
6. Summarize the results of the field tests and submit to the City.

Assumptions

- Pump tests will not be performed as it is AECOM's understanding that the City has the information available for the water system model.
- City will provide 2 to 3 personnel to assist with field testing and who will operate all valves. AECOM will provide 1 person for 4 days.
- City of La Crosse will provide coordination and notification for field testing with appropriate parties, such as Fire Department, customers, and other City Departments. The City will be responsible for traffic, erosion control, and landscaping repairs.

Task 4: Model Calibration

The purpose of the model calibration process is to ensure that the model represents the real system as accurately as possible. It is proposed that model calibration be performed using macro and micro approaches to ensure that the model most accurately represents the existing distribution system.

Macro Calibration – Extended Period Calibration

Macro calibration compares how accurately the model represents the water system under normal operating conditions. This is usually performed over an extended time period, and the model will be operated under known demand and operating conditions and will be compared with field measurements gathered during field testing. Adjustments for doing this level of calibration usually address variations in water demands, and operation of pump stations and storage facilities.

For this subtask, AECOM will provide the following services:

1. Prepare modeling scenarios to reflect field testing operating conditions.
2. Perform model simulations under field test operating conditions.
3. Prepare time-related graphs comparing modeling results to SCADA and field testing measurements.
4. Adjust modeling parameters to improve macro calibration results.
5. Summarize results of model calibration in a technical memorandum and submit to the City.

Micro Calibration – Steady-State Calibration

Micro calibration examines how accurately the model represents the water system under stressed (high flow) conditions such as fire demands. Adjustments to C-factors are most effective to achieve micro calibration. AECOM's approach using C-factor aging curves will be used during the micro calibration to ensure "global" calibration rather than local calibration.

The hydraulic model is only as good as the calibration effort.

For this subtask, AECOM will provide the following services:

1. Prepare modeling scenarios to reflect field testing operating conditions.
2. Perform model simulations under field test operational conditions.
3. Prepare table comparing model results to flow test data and continuous pressure monitors.
4. Adjust modeling parameters to improve micro calibration.
5. Summarize the results of calibration in a technical memorandum and submit to the City.

Deliverables

- Field Testing and Model Calibration Summary (technical memorandum).
- Calibrated hydraulic model (electronic files).

Assumptions

- The City will provide customer meter data in a format usable for demand allocation (link between customer billing data and location (parcel, customer meter, service, etc.).
- SCADA data will be available in electronic format during the time period of field testing.
- If model calibration does not meet the general industry standards within the budgeted hours, AECOM will make recommendations to the City for additional field work and model calibration. For example, unknown closed valves can sometimes prevent the model from being calibrated accurately.

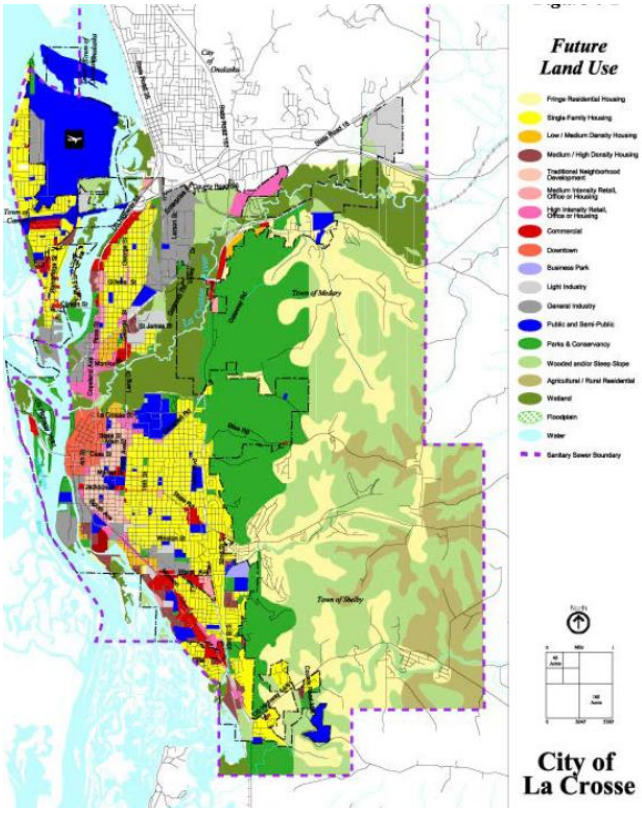
Phase 2: Water System Evaluation and Projections

Task 1: Population and Community Growth Projections

The purpose of this task is to clearly identify the water service area boundary and growth projections over the planning period. AECOM will achieve this by close communication between City staff to ensure an understanding of how the City of La Crosse is projected to grow over the planning period. This is of critical importance to the overall project, because the type of growth and its location will have a direct influence on overall water requirements that need to be provided.

For this task, AECOM will provide the following services:

1. Gather information on service area and historical and projected growth information available from City Planning Department staff. Include any growth as defined in boundary agreements with surrounding communities.
2. Evaluate ability and cost effectiveness to serve the Highway 14/61 corridor.
3. Review City of La Crosse future land use plans.
4. Summarize the information provided by the City and the City planners in the form of anticipated population growth over the planning period.
5. Work with planners to identify the 20 year buildout of areas to be potential expanded and developed in the City of La Crosse.
6. Develop a map showing likely land use and growth areas with associated timing and include potential interconnections with neighboring utilities.
7. Meet with City staff and City planners to discuss population growth and development in the City and projected growth along with future land use plans.
8. Prepare a Master Plan Update draft chapter on population and community growth for review by City staff.
9. Finalize the population and community growth report chapter based on comments from City staff.



Deliverables

- Draft and final report chapter.

Assumptions

- Future land use information will be available.

Future growth planning projections form the backbone for projecting future (20-year) water consumption projections and reaching consensus regarding projections is essential for successful development of a master plan.

Task 2: Water Requirements

The purpose of this task is to establish the water requirements for the City of La Crosse over the planning period. The water requirements will be the driving force on determining whether the existing system has sufficient capacity to meet those needs and the types and locations of future improvements. AECOM will follow a well-established and approved process for determining existing and future water requirements.

For this task, AECOM will provide the following services:

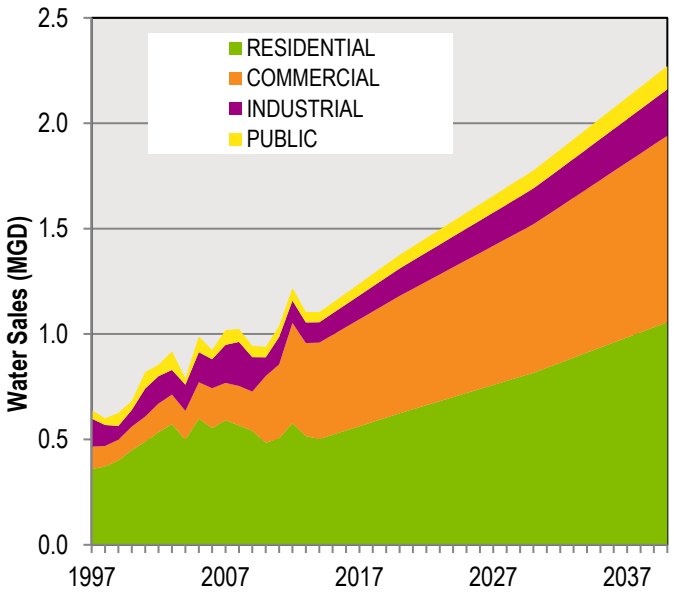
1. Review existing historical water demands and characteristics by type (residential, multi-family, commercial, industrial, and public). Summarize this information in tables and figures to illustrate key characteristics of historical water demands.
2. Establish per capita water use for different categories of users and compare this with Wisconsin and national averages.
3. Review information provided by the City for high volume water customers. Provide the City with a survey form for use in soliciting input from high volume customers regarding their water need characteristics and potential future changes in business activity that may impact water consumption. Review the results of the survey and coordinate with the hydraulic model.
4. Perform a summary of historical non-revenue water (NRW) and provide an opinion on acceptable levels for non-revenue water.
5. Establish maximum day ratio to be used for water requirement projections. The maximum day water demand ratio will be established based on a historical analysis of average and maximum water demands.
6. Establish peak hour ratios to be used for water requirement projections. Diurnal demand curve (hourly demand fluctuations) will be developed from review of existing supervisory control and data acquisition (SCADA) data for each pressure zone to determine the peak hour ratio.
7. Project future water consumption and pumpage. These projections will be made based on the projection of population increase, as defined under Task 1 and the future land use throughout the service area to be provided with water over the planning period. In addition, information from existing large users will be requested in the form of a survey to establish their current water usage and potential increase or trends over the planning period to ensure that they are adequately included in the projections of water requirements. The water consumption and pumpage projections will be performed for each pressure zone.
8. Prepare a Master Plan Update draft chapter summarizing the water requirements, and discuss the requirements with City staff.
9. Finalize the chapter on water requirements based on comments from City staff.

Deliverables

- Draft and final report chapters.

Assumptions

- SCADA data will be available in electronic format.



Example Water Projections by Customer Classification

Task 3: Existing Water System Facilities

The purpose of this task is to summarize the details of each water system facility operated and maintained by the City.

For this task, AECOM will provide the following services:

1. Request information on all existing water system facilities and proposed 5-year CIP projections through the City Engineering Department and Utility.
2. Prepare a summary of existing water system facility information in the form of tables and figures.
3. Prepare a water system map identifying the locations and types of key water system facilities and identifying proposed projects in the 5-year CIP plan.
4. Prepare a schematic of the overall water system.
5. Prepare a draft of the report chapter that discusses overall existing water system facilities.
6. Finalize the chapter based on comments from the City.

Deliverables

- Draft and final report chapters.

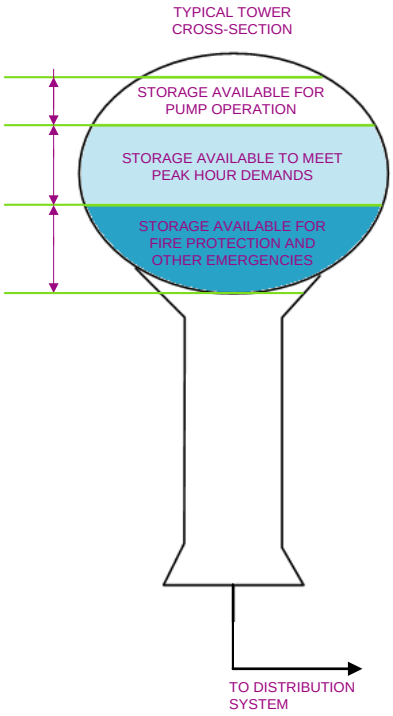
Task 4: Existing and Future Water Supply and Storage Evaluation

The purpose of this task is to evaluate the water supply and storage available to the existing and future water system based on future demand projections and growth areas.

1. Perform a water supply analysis to determine the ability of the system to meet current and future water needs, and to identify any shortfalls.
2. Evaluate pumping facilities' capacities to ensure they are adequate to provide water to customers throughout the service area.
2. Perform both steady-state and EPS analyses to determine required water storage needs. Use the hydraulic model to assist in the overall supply and storage needs analysis.
3. Perform a supply and storage analysis to determine the required water storage capacity.
4. Prepare a Master Plan Update draft chapter summarizing the supply and storage analysis.
5. Discuss with City staff at Deficiency Workshop.
6. Finalize the report chapter based on comments from City staff.

Deliverables

- Draft and final report chapters.



Task 5: Water System Evaluation

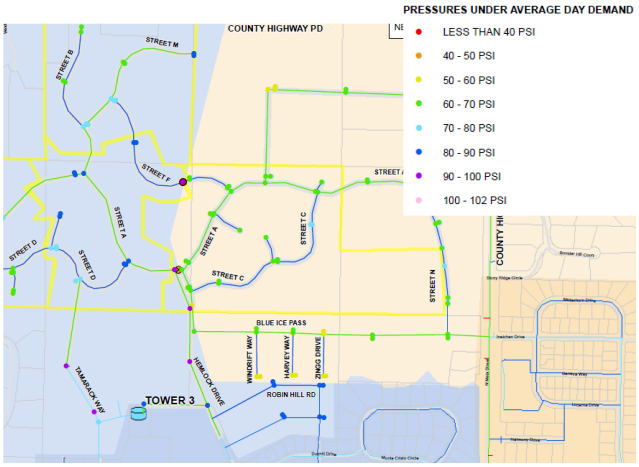
The purpose of this subtask is to evaluate the capacity of the existing water system to meet the current and future customer requirements of providing water at adequate flows and pressures.

For this task, AECOM will provide the following services:

1. Perform hydraulic model simulations to evaluate available pressures, fire flows, and water age throughout the water system. Use the hydraulic model to identify locations in the piping system with unusually high headlosses or high velocities.
2. Prepare color-coded maps illustrating water system pressures and available fire flows.
3. Evaluate and report on the system improvement, or lack thereof, of proposed 5-year CIP project (project by project). Make recommendation for keeping projects in the budget or for re-prioritizing spending.
4. Identify system deficiencies on a map and prioritize/rank significance of each.
5. Prepare a map of water age and identify points or areas of oldest water under various seasonal pumping scenarios.
6. Prepare exhibits and conduct a workshop with City staff to discuss the system deficiencies identified, evaluation of 5-year CIP, and solicit feedback on conceptual improvements.
7. Prepare a Master Plan Update draft chapter summarizing the water system evaluation.

Deliverables

- Workshop presentation.
- Draft and final report chapters.



Example Map illustrating Water System Pressures from Hydraulic Model

Task 6: Reporting

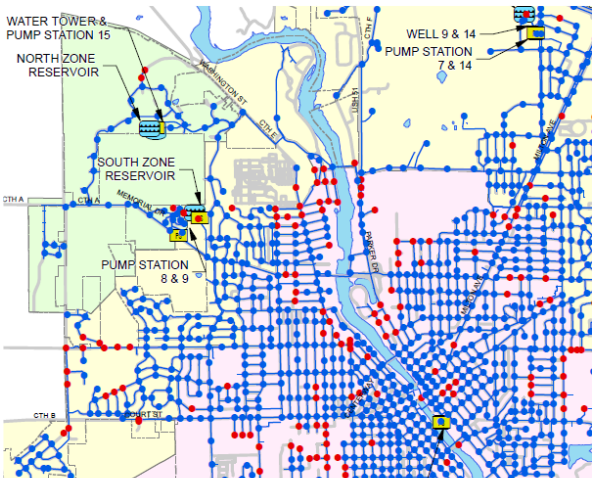
This task addresses the final report for the study.

For this task, AECOM will provide the following services:

1. Prepare a draft report.
2. Finalize the draft report based on the comments provided by the City.

Deliverables

- Draft and final report chapters.



Example Map illustrating Pass/Fail of Fire Hydrants meeting Estimated Fire Flow Requirements Based on Land Use

Phase 3: Improvement Engineering

Task 1: Operational Improvements

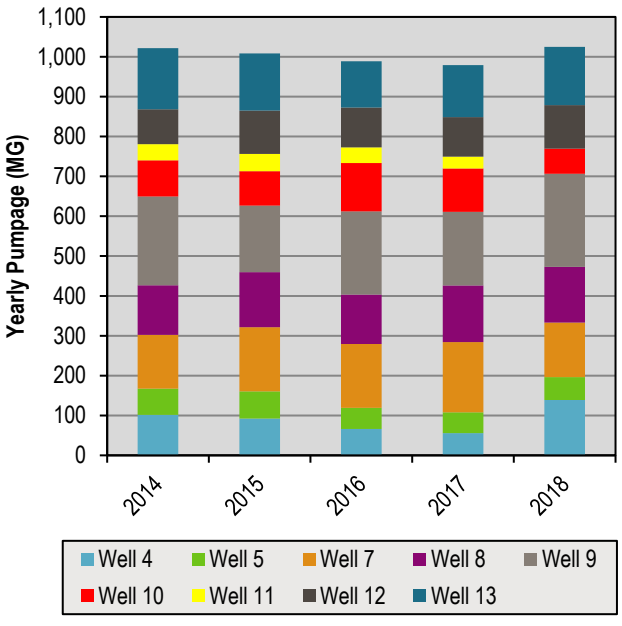
The purpose of the operational improvements subtask is to identify areas in current operational practices that may be leading to deficiencies in the system (low pressure, water age, etc.) and suggest alternate approaches to reduce or eliminate said deficiencies.

For this subtask, AECOM will provide the following services:

1. Compare operational practices to modeled deficiencies for correlation
2. Identify operational practices related to deficiencies and describe how they contribute
3. Propose alternate operational practices (in addition to infrastructure improvements) to help mitigate these deficiencies

Deliverables

- Draft and final report chapters.



Example Graph of Historical Well Pumpage

Task 2: Improvement Planning

The purpose of this task is to outline water system improvements that are required over the planning period to ensure that both regulatory and customer requirements are met.

For this task, AECOM will provide the following services:

1. Identify current pressure zone boundaries to ensure that customer services are maintained or improved.
2. Identify future pressure zones that need to be created to ensure that future service areas can be adequately supplied with water.
3. Establish the number and tentative locations of additional water supply sources (wells) that are needed to meet existing and future water demands (if any).
4. Identify the need for upgrading the existing booster pump stations to ensure that water can be transferred from the wells to the current pressure zones and the identification of additional booster pump stations that may be required to service future pressure zones and to ensure reliability of supply to existing pressure zones.
5. Identify the capacity and location of additional storage needs, if needed.
6. Identify improvements to the water distribution system to ensure that adequate water can be transmitted to customers at required flows and pressures. This evaluation includes both the existing water distribution system and expansion of the water distribution system in areas of new development.
7. Develop a map and schematic that illustrates the recommended system improvements.
8. Conduct a workshop with City staff to discuss the recommended improvements and solicit their input on the recommended improvements.
9. Prepare a draft chapter summarizing the recommended water system improvements.
10. Meet with City staff to discuss the improvements and finalize the report based on comments from City staff.

Deliverables

- Workshop presentation.
- Draft and final report chapters.

Task 3: 20-Year Capital Improvements Planning

The purpose of the 20-year capital improvement plan is to establish the short- and long-term improvements required to meet the growing water demands and growth in the City. The capital improvement plan will document both recommended timing and cost for system improvements that are required over the planning period.

For this task, AECOM will provide the following services:

1. Estimate costs and prepare a prioritized capital improvement plan for water system improvements for the 20-year planning horizon that is compatible with City policies and financial goals.
2. Discuss the capital improvement plan with City staff.
3. Finalize the capital improvement plan based on comments from City staff.

Deliverables

- Draft and final report.

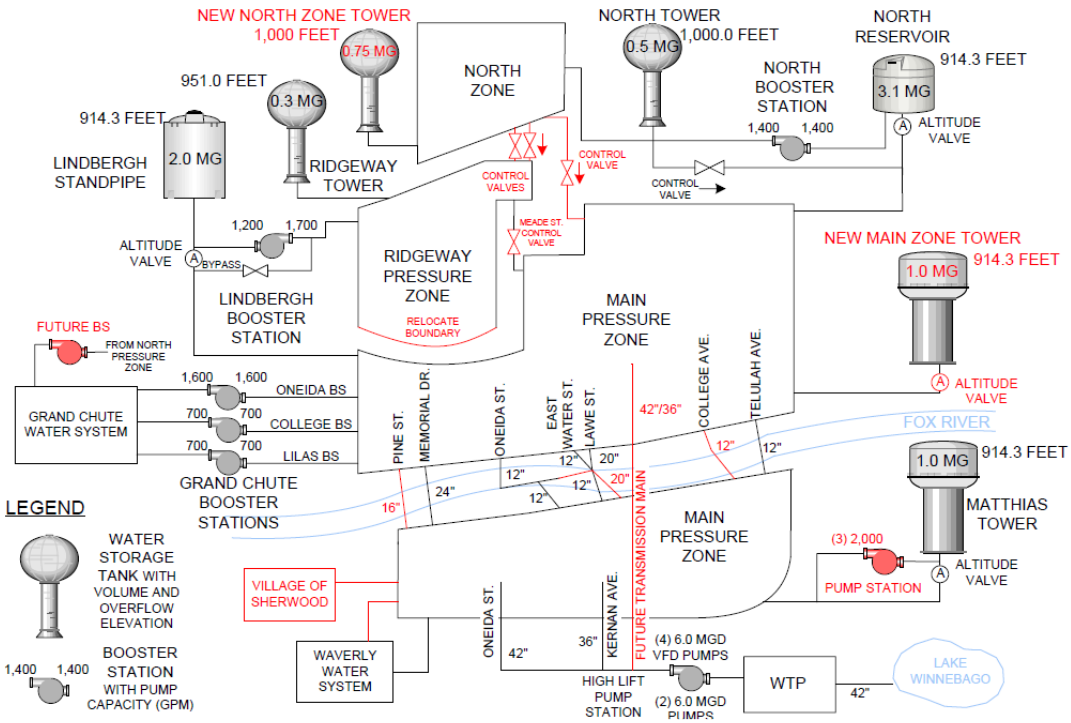
Task 4: Reporting

This task addresses the final report for the study. For this task, AECOM will provide the following services:

1. Prepare a Master Plan outline for review by City staff.
2. Prepare a draft report including findings, recommendations, capital cost estimates and implementation schedule of recommended improvements.
3. Review the draft report with the City and finalize the report based on comments from City staff.
4. Provide a presentation of project results to City.

Deliverables

- Outline, draft and final report.
- One meeting.



Example Future Water System Schematic with Recommended Improvements for the City of Appleton

Optional Tasks

Task 1: Water Main Replacement Rate Analysis

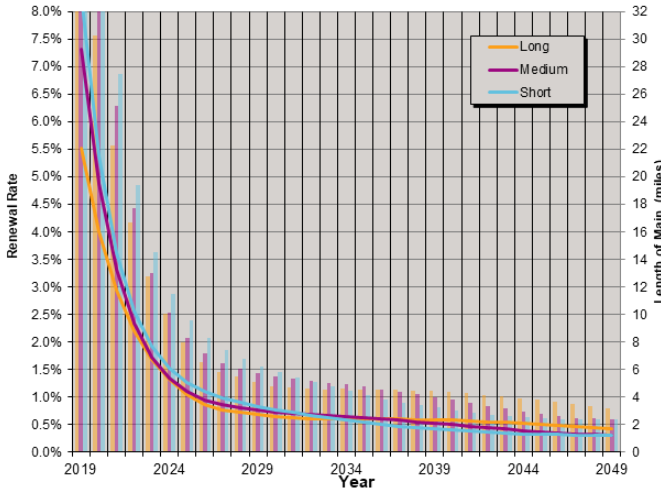
The purpose of this analysis is to provide the City of La Crosse with guidelines for long-range water main rehabilitation and replacement strategies.

For this task, AECOM will provide the following services:

1. Determine water main categories considering soil type and decide on survival curves based on input from City.
2. Enter information on water main material, length, age, and diameter into AWWARF's KANEW model by categroy.
3. Perform macro analysis of needed replacement rate for water mains using the KANEW software.
4. Provide benchmarking information based on average retirement rates for the Class AB water systems in Wisconsin using the PSC annual report data.
5. Prepare a technical memorandum on the results and conclusions from the KANEW analysis.

Deliverables

- Draft and final technical memorandums.

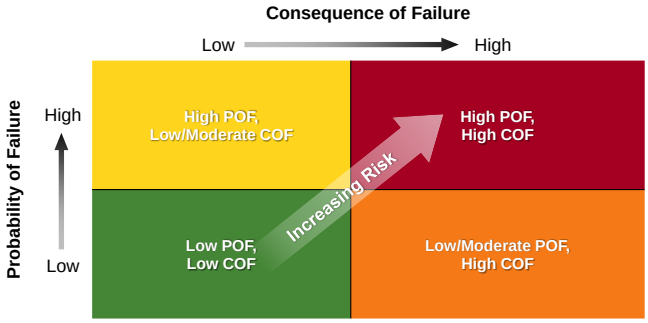


Example Annual Water Main Renewal Rates based on Short and Long Life Expectancies

Task 2: Water Main Replacement Prioritization Analysis

The purpose of this task is to provide a systematic methodology for the prioritization of water main replacement based on the consequence of failure (COF) and probability of failure (POF) for each water main. AECOM will modify the previous prioritization analysis to be a risk-based approach and consider the pavement replacement program.

For this task, AECOM will provide the following services:



1. Request additional information required to perform risk analysis.
2. Present a risk-based approach for establishing COF and POF components for water mains to City staff based on experience including soil type.
3. Determine COF and POF score and weight factors to be used in the prioritization analysis.
4. Create a prioritization model for the City of La Crosse water mains based on the agreed upon components and weighting factors.
5. Prepare a color-coded water system map to illustrate the location and timing of recommended water main replacements.
6. Conduct a workshop with City staff to discuss the results of the KANEW and prioritization analyses.
7. Prepare a technical memorandum based on the results and conclusions from the risk analysis.

Deliverables

- Workshop presentation.
- Draft and final technical memorandums.

Task 3: Leak/Break Analysis

The purpose of this task is to analyze historical water main leak and break trends based on available break and leak records to help identify age and material classes of pipes at higher risk of failure. Such data will be used to assist with the water main replacement program.

For this task, AECOM will provide the following services:

1. Analyze the frequency of leaks/breaks per 100 miles of water main per year historically and benchmark with other data available.
2. Evaluate leak and break history to assist in determining water failure trends and in identifying an appropriate water main replacement strategy. Trends to evaluate include:
    a. Correlation with year reported.
    b. Correlation with diameter.
    c. Correlation with material.
    d. Correlation with material and installation date.
    e. Correlation with pressure zone.
    f. Correlation with water system pressure.
    g. Correlation with age of pipe.
3. Provide benchmarking information based other available data.
4. Prepare a draft report chapter summarizing the results of the evaluation.
5. Finalize the chapter based on comments from the City.

Deliverables

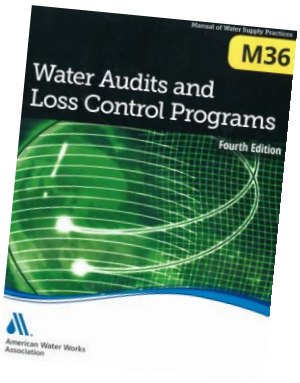
- Draft and final technical memorandums.

Assumptions

- Historical leak and break data is available in an electronic format spatially (GIS) such that each leak/break event location can be accurately assigned to a location on a specific pipe segment.

Task 4: Water Loss Evaluation

For the purpose of identifying opportunities to reduce water loss, including leak detection, AECOM will assist City staff with preparing a detailed water balance in accordance with AWWA Manual M36. The M36 process is similar to the water audit required by the PSC, but is more detailed and structured. AECOM believes that the process of developing the M36 water balance will help the City understand all the uses of water, may demonstrate less real water losses than currently reported, and will help understand the cost-effectiveness of real loss recovery options, such as leak detection.



For this task, AECOM will provide the following services:

1. Perform a water balance to establish key water loss parameters (non-revenue water, non-metered water, unavoidable annual real losses, current annual real losses (CARL), infrastructure leakage index (ILI), and cost of water losses).
2. Compare key indicators with other communities.
3. Evaluate alternative forms of active leakage control (ALC), including leak detection.
4. Evaluate the feasibility of early water leak indication techniques, such as minimum night flow trending.
5. Recommend categories of water use for which more detailed data collection efforts are warranted.
6. Recommend options for possibly improving the water audit, lowering non-revenue water, and lowering real water losses in the future.
7. Prepare a draft report chapter summarizing the results of the evaluation.
8. Finalize the chapter based on comments from the City.

Deliverables

- Draft and final technical memorandums.

Assumptions

- City staff will assist with the water balance data collection and completion.

Phase 4: AWIA Risk and Resilience/Emergency Response Plan

On October 23, 2018, the president signed into law the American Water Infrastructure Act (AWIA) which amends the Safe Drinking Water Act (SDWA). AWIA is Public Law 115-270. The AWIA includes revisions for Community Water System (CWS) risk and resilience.

Section 1433 of the Safe Drinking Water Act titled - Community Water System Risk and Resilience was amended by the AWIA. The regulatory requirements from AWIA include:

1. Update Risk and Resilience Assessments (RRA)
2. Update Emergency Response Plans (ERP)
3. Submit a Certification Letter to EPA for each
4. Review, update, and record updates at a minimum every 5 years after the initial certified updates.

This scope will assist the City with the AWIA required updates to the RRA and ERP.

Updating the RRA and ERP will be an ongoing requirement for water systems; therefore, our proposed scope includes the City working with AECOM to prepare the RRA and ERP so they will be ready to complete updates in the future with occasional external support for the work in key areas of specialty such as cyber security reviews.

For the RRA and ERP updates, AECOM is proposing two tasks. Task 1, Updates for the RRA, will include 3 workshops that will serve as hands on training opportunities for City staff.

Task 2, Updates for the ERP will include 1 workshop and 1 meeting with City Staff.

Optional tasks are provided if the City would prefer to have AECOM perform more of the work to reduce the load on City staff to complete the project.

The following sections outlines the two tasks and the corresponding workshops/meeting.

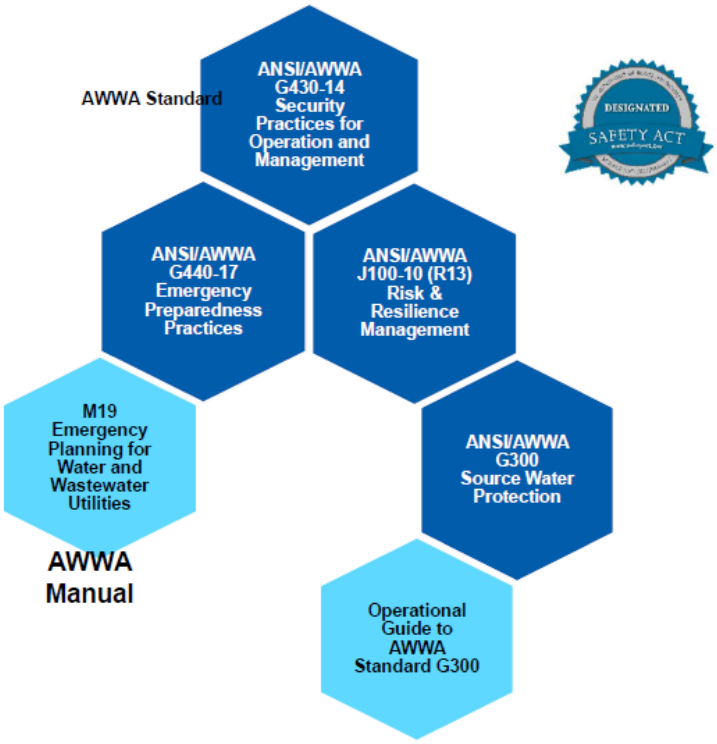
Note: This section addresses the RFP Task – Risk Setting in that the City requirements, expectations, and acceptable level or risk will be a part of the discussion in the capital improvement plan review and selection noted in Task 1 Updates for RRA Workshop 3.

Task 1: Updates for RRA

The new AWIA requirements regarding RRAs include:

1. Threats from natural hazards are to be included with the original “malevolent acts” threats.
2. Cyber assets must be added for RRA review.
3. The financial infrastructure must be added for RRA Review.
4. A list of capital improvements based on RRA results should be included.

EPA is required to accept RRA documents completed using industry standard practices. Therefore, AECOM has provided an approach that generally follows the AWWA J100 standard. Another benefit to following the AWWA J100 standard is the standard has been “Designated” approved to meet Safety Act requirements. Use of “Designated Safety Act” standards reduces the potential liability and legal action against a water system after an adverse event.



The original RRA document was a Vulnerability Assessment (VA) created in 2003 by AECOM (formerly known as Earth Tech). The report has not been updated; however, the City remains engaged in monitoring and ensuring system security.

VAs are similar to RRAs in that a methodical approach is used to compare assets and threats to determine risk. RRAs are an improvement on the original VA in that risks associated with natural hazards are added into the review process and a new evaluation criterion has been added for resiliency. As such, an update to the previous VA alone will not meet the needs for the City; however, the previous VA can serve as a guideline for updates to be added into the system.

The proposed RRA would follow the AWWA J100 Methodology which includes:

1. Asset Characterization - identify critical assets
2. Threat Characterization - select appropriate threats and hazards
3. Consequence Analysis - determine consequences for each threat-asset (T-A) pair
4. Vulnerability Analysis - estimate effectiveness of existing mitigation measures
5. Threat Likelihood Analysis - determine threat likelihood
6. Risk/Resilience Analysis - determine baseline risk and resilience
7. Risk/Resilience Management - Apply mitigation measures and re-evaluate risk and resilience

The calculations used for the J100 process are:

$$R = C \times V \times T, \text{ where:}$$

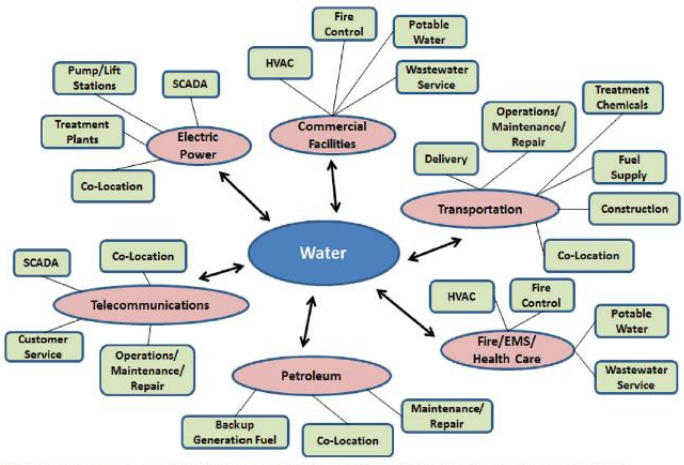
R = Risk
C = Consequences
V = Vulnerability
T = Threat Likelihood

$$Re = D \times S \times V \times T, \text{ where:}$$

Re = Resilience
D = Duration
S = Service Denial
V = Vulnerability
T = Threat Likelihood

The J100 process will be modified slightly to remove direct calculations and use scoring measures of low, medium, and high to reduce the complexity of the review process and match the scope of the RRA to the community size.

AECOM will work through the RRA process with the City in a series of workshops that will provide a transparent process and a path for the City to self-perform the work at the recertification period in 5 years. Each workshop should be scheduled for 6 to 8 hours.



EMS: emergency, management system, HVAC: heating, ventilating, and air conditioning, SCADA: supervisory control and data acquisition
Source: Morley (2012)

AWIA requires review of Water Utility interdependencies. Industry available lists such as provided in this figure, will help the team quickly evaluate the interdependencies for the RRA.

Workshop 1

At the first workshop, AECOM and the City of La Crosse team will start with a quick training and review of the J100 process and why this process is approved by AWIA and protects the City from liability.

A discussion on acceptable risk and the VA selected risk values verses the J100 scoring will be discussed.

Following the short training the RRA team will review the asset characterization presented in the historic VA and confirm no changes in the asset ranking has occurred since the last review. Assets such as cyber assets will be added to meet AWIA requirements.

The AECOM and City of La Crosse team will review the threats and hazards listed in AWWA J100 and the provided threat likelihoods provided from EPA. Methods to source this information will be provided for future work. This will provide the “T” value for the risk review. Threats will include malevolent, natural disaster, and dependency and proximity threats to meet AWIA requirements following AWWA J100.

For the threat review portion of this workshop, it is helpful to have law enforcement as well as City personnel at the meeting. Law enforcement can provide updates to malevolent act potential that may adjust EPA scores or provide more detail to potential routes of access or focus of malevolent activity. The City should extend the request for law enforcement attendance.

AECOM will go through how threat-asset (T-A) pairs are evaluated and a generalized analysis will be conducted to arrive at the top T-A pairs. The list of top T-A pairs will be submitted to the team for use at the next RRA workshop.

Workshop 2

At the second workshop, AECOM and the City of La Crosse team begin more detailed review of the consequence and vulnerability of each asset by reviewing failure modes for the selected T-A pairs. This process will also yield options for improvements that will be discussed.

To start, the 2003 standard operating procedures form completed with the vulnerability assessment will be reviewed and updated so any operational procedures that may improve resiliency are included in vulnerability review of the T-A pairs.

The AECOM and City team will complete a financial assessment checklist to meet the AWIA requirements. It is recommended that at least one person of the financial team that completes the Public Service Commission (PSC) annual reporting on behalf of the City be available to assist with answering these questions. AECOM will provide the Financial Resilience Index Worksheet for this workshop.

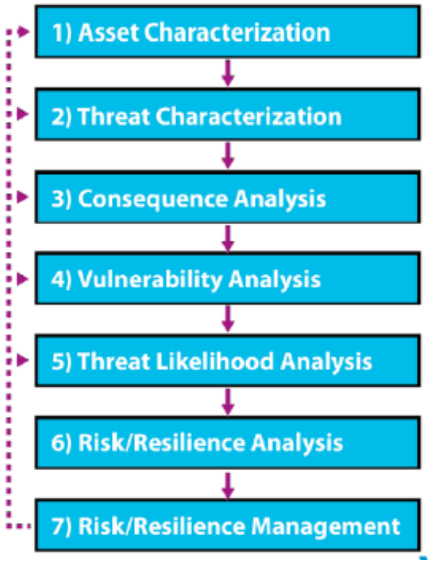
At this workshop, the historic consequence of asset loss for a specific undesired event (T-A pair) will be reviewed to confirm the overall low, medium, or high characterization of that T-A pair. New T-A pairs will be added as developed in Workshop 1.

Following the consequence analysis, the vulnerability of each asset is reviewed to determine the ability of the system to prevent the event from occurring (system effectiveness evaluation). This workshop will look at the ability of the system to detect, delay, and respond to malevolent acts. The review is conducted on the T-A pairs with the highest consequences and likelihood.

Historic review of vulnerability to T-A pairs will be reviewed and new, high ranking T-A pairs will be added into the review. Additional criteria for resiliency will be added to the review to meet the improvements to the RRA process.

Availability of key asset drawings, system drawings, and key staff will assist with this analysis and provide the best quality product.

Following this meeting, the overall risk and resiliency value of low, medium, and high will be selected.



AWWA J100 Methodology

Workshop 3

At the third workshop, AECOM and the City of La Crosse team will review options for improvements that will reduce risk and improve resiliency. Historic upgrades from the previous VA will be reviewed; however, no previous risk reduction evaluations will be carried forward and this review will be a fresh review of improvements.

Options that reduce the risk and improve overall resiliency will be evaluated across all the major T-A pairs (scenarios). For each improvement the AECOM and City team will review the measures of consequence, the system effectiveness (vulnerability), the threat likelihood, the duration, and service denial. Each risk reduction or resiliency improvement option will be provided a valuation of low, medium, or high.

Following the meeting, the recommend improvements list would be available. The cost for the improvements would be developed by the City with an option for AECOM to complete this task.

The City should incorporate the best value risk reduction and resiliency improvement measures in their capital improvements plan (CIP) and use the high priority items in the RRA to drive key updates for the ERP.

The selection process for improvements will document the acceptable level of risk as required in the RFP - Phase 4 item 1.

After the completion of the CIP, the City must send a certification letter noting the RRA is complete.

Task 1 Deliverables

- Working files including spreadsheets for T-A pair review and risk and resiliency calculation, training power point slides, workshop agendas, forms for procedural reviews, and key reference tables and figures.
- A draft certification letter which highlights the scope of work completed will be provided to the City.

Task 1 Assumptions

1. Each workshop will be one trip and up to 8 hours in length.
2. City will maintain minutes and update spreadsheets from each workshop. This reduces the needed consulting staff and provides more hands-on training for City staff. AECOM can review the workshop minutes to confirm the information at the meeting was properly conveyed and documented and the City staff have a working understanding of the concepts to prepare them for future work on these tasks. The minutes of the meeting will serve as documentation for the RRA work. – **Option 1** is for AECOM to complete this task. With this option, a second staff member from AECOM will attend all workshops to allow the trainer to focus on the discussion while the second person documents the discussion.
3. AECOM will provide the format for the spreadsheets, direction for completing the spreadsheets, and review of the completed spreadsheets. The City will populate the spreadsheets and provide the populated spreadsheets for review at least a week prior to the next workshop. **Option 2** is for AECOM to complete the spreadsheet updates at the meetings and workshops and the associated follow-up after the workshops.
4. The City will complete cost estimates for the improvement plans. **Option 3** is for AECOM to complete cost estimates for the top 10 improvements.
5. Training on RRA and the J100 format will be completed within Workshop 1 and will be less than 1 hour in length. Longer training would take away from the Workshop time and should be completed using other training tools.
6. The AWWA J100 methodology within this scope has been modified to use the low, medium, high review criteria verses numeric scores. As such, RRA modeling programs such as VSAT and PARRE will not be utilized. Upon request, AECOM will provide a cost estimate and further scope details to create a numeric score review using the PARRE program.
7. Detailed cyber security review is completed by others.

Task 2: Updates for ERP

The AWIA updates to 1433 regarding the Emergency Response Plan (ERP) include:

1. Linking the RRA results for physical security and cybersecurity in the ERP.
2. Plans and equipment in events of malevolent act or natural hazard that threaten the ability to deliver safe water.
3. Development of alternative water source options as detailed in AWIA.
4. Strategies to aid in detection of malevolent acts or natural hazards.
5. Coordination with existing local emergency planning committees.

The following includes AECOM's approach to Task 2.

AECOM will review the existing ERP to determine where it does and does not meet the new AWIA requirements and the following 7 AWWA standard G440 major principles of ERPs:

1. Preparedness
2. Resilience
3. All-hazards approach
4. Scalability
5. Regular updates
6. Stakeholder engagement
7. Staff preparation

Following this review, AECOM will prioritize the ERP updates needed to meet the AWIA and AWWA G440 standards. AECOM will provide the gap analysis prior to Meeting 1 to aid in discussion and prioritization.

One meeting and one workshop will be held for this task.

ERP Gap Review – Meeting 1

AECOM will meet with the City of La Crosse leadership to discuss the ERP gap analysis sent prior to the meeting and provide a proposed plan to address those gaps. Key elements from the RRA will be reviewed to discuss the most important ERP updates to improve resiliency and make a timeline to create a robust ERP document; properly scaled for the Utility size and assets.

The ERP must address the highest risk items from the RRA. Typically, distribution system contamination is a very high risk scenario for water utilities. To address this risk in the ERP, AECOM will provide a contamination response protocol based on EPA contamination tool for the City to review and incorporate into their ERP to address this high risk item.

Workshop 1

AECOM and City staff will hold an 8-hour workshop. At a minimum, the workshop will:

1. Coordinate a Hazard-Specific plan response related for the highest T-A pair,
2. Create a framework for alternative water supply in an emergency,
3. Update backup power plans,
4. Add cyber security emergency plans by others into the ERP document by reference,
5. Discuss lessons learned from historic emergencies such as excessive freezing services or flooding to capture in the ERP.

Based on the discussion at the ERP Gap Review - Meeting 1 other items for ERP updates may include:

- Contact updates,
- Crisis communication plans,
- Equipment lists and rental equipment companies list,
- Critical customer documentation and communication plan,
- Vendor and supplier back-up contracts,
- Additional hazard specific plans,
- Coordination of other emergency response plans such as spill response within the ERP,
- Review financial response to emergency events,
- Discuss employee preparation for emergency events.

The number of items updated in the workshop is variable and AECOM will develop the workshop agenda to prioritize training on items of key importance to the ERP meeting the AWIA requirements and allow the City to finalize items outside the workshop as needed.

The ERP is a document that will require ongoing review and updates. As such, this document is never completed, but is updated and revised to meet the City's needs.

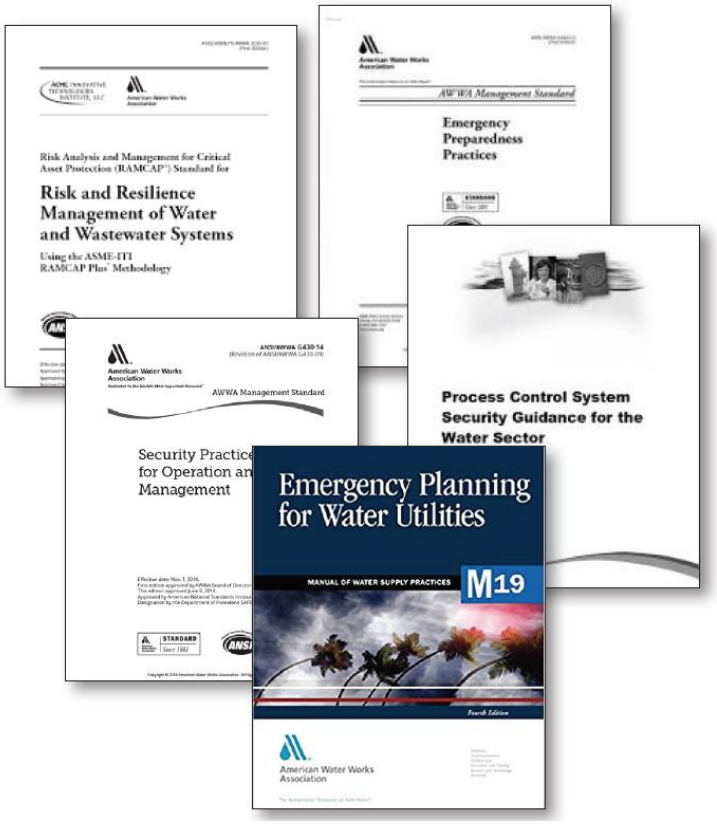
Upon completion of items determined at the ERP Gap Review - Meeting 1 that need to be addressed to meet the AWIA requirements, the City of La Crosse Water Utilities will submit a certification letter noting the ERP is updated.

Task 2 Deliverables

- List of items to be completed to meet AWIA criteria.
- Contamination response plan.
- Draft certification letter for the City to utilize in the final certification letter documentation.

Task 2 Assumptions

- The City will provide the existing ERP at least 2 weeks in advance of the ERP Gap Review - Meeting 1.
- Meeting 1 will be a teleconference with shared screen review of common documents.
- City staff will maintain minutes and update the ERP based on the workshop discussion. This reduces the needed consulting staff and provides more hands-on training for City staff. AECOM can review the workshop minutes and ERP updates to confirm the information at the meeting was properly conveyed and documented and the city staff have a working understanding of the concepts to prepare them for future work on ERP updates. The minutes of the meeting will serve as documentation for the ERP work. – Cost for AECOM to complete these items may be provided following the ERP Gap Review - Meeting 1.



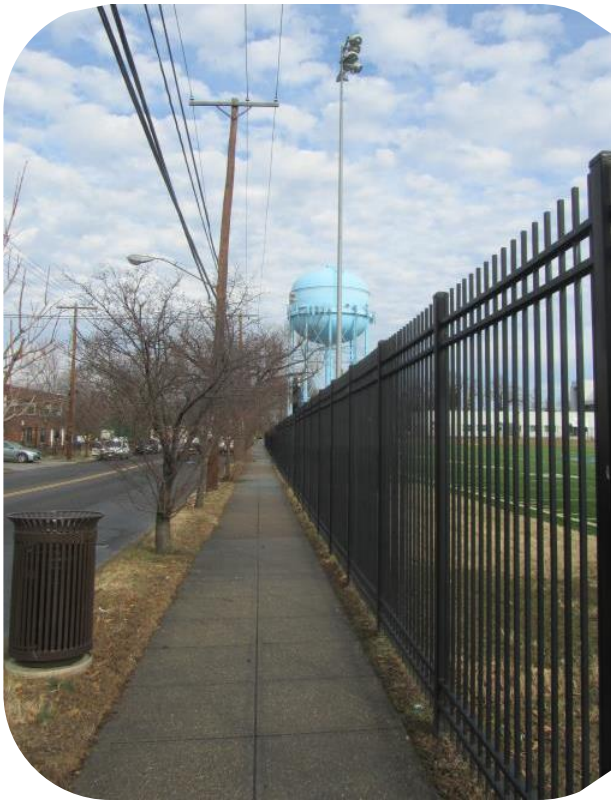


Exhibit B -Project Budget

The budget, including hours and average hourly rate for the Water System Master Plan and R&R/ERP along with the optional tasks for each are summarized in the tables below.

Project Tasks	Water System Master Plan Estimated Hours					Total Hours	Total Cost
	Project Manager/ Technical Advisor	Senior Engineer	Project Engineer	Technician	Admin Staff		
Phase 1: Hydraulic Model Update & Calibration							
Review Existing Model & Plan	27	4	8	4	18	61	$8,838
Model Creation/Update	-	6	34	12	-	52	$4,717
Field Tests	2	4	53	22	10	91	$7,825
Model Calibration	1	7	64	28	2	102	$8,748
Phase 2: Water System Evaluation & Projections							
Population & Community Growth Projections	9	7	15	9	2	42	$5,162
Water Requirements	2	10	27	17	16	72	$7,056
Existing Water System Facilities	3	3	22	30	6	64	$5,330
Existing & Future Water Supply & Storage Evaluation	2	5	20	5	2	34	$3,531
Water System Evaluation	10	6	52	26	4	98	$9,452
Reporting	4	7	18	16	10	55	$5,524
Phase 3: Improvement Planning and Capital Improvement Plan							
Operational Improvements	2	8	16	8	8	42	$4,495
Water System Improvement Planning	13	12	56	22	4	107	$11,333
Capital Improvements Plan Development	7	11	16	5	2	41	$5,380
Reporting	13	12	28	18	18	89	$10,017
Expenses							
Expenses							$2,410
Total							**$99,818**

Optional Task	Project Manager/ Technical Advisor	Senior Engineer	Project Engineer	Technician	Admin Staff	Total Hours	Total Cost
Water Main Replacement Rate	4	9	24	2	4	43	$5,059
Water Main Prioritization	16	18	91	28	4	157	$16,400
Leak & Break Analysis	3	6	32	10	4	55	$5,410
Water Loss Evaluation	4	5	28	1	3	41	$4,472

Project Tasks Risk & Resilience/ERP	Risk and Resiliency/ERP Estimated Hours Quality Reviewer	Senior Engineer	Project Engineer	Admin Staff	Travel	Total Hours	Total Cost
Risk and Resilience Task	11	47	12	4	260	74	$11,491
ERP Task	6	34	10		130	50	$7,496
Total	**17**	**81**	**22**	**4**		**124**	**$18,987**

Optional Task Item

Optional Task	Quality Reviewer	Senior Engineer	Project Engineer	Admin Staff	Travel	Total Hours	Total Cost
Minutes Preparation	6	-	54	2		62	$5,728
Spreadsheet Updates	8	16	48			72	$8,045
Cost Estimates	1	4	20			25	$2,467

Exhibit C - Project Schedule

Water System Master Plan

On the following page is AECOM's proposed schedule for the Water System Master Plan. AECOM developed the schedule so Master Plan report chapters are completed as we progress through growth and demand projections, deficiency analysis, and improvement planning. The City staff can, therefore, review components throughout the project, which will aid in successfully completing the project on schedule.

Risk and Resiliency Assessment and Emergency Response Plan

The American Water Infrastructure Act (AWIA) established deadlines for compliance for the Risk and Resiliency Assessments (RRA) and Emergency Response Plan (ERP) based on the population served by the water system. The AWIA compliance deadlines for communities serving between 50,000 and a 100,000 people are December 31, 2020 for the RRA and six months later or typically June 30, 2021 for the ERP. With no incentives for completing the certification for the RRA and ERP early, the schedule deadlines for this work will follow the regulatory framework as shown below.

Risk and Resiliency Assessment and Emergency Response Plan Schedule

Task	2020								2021					
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
4.1 Risk and Resilience Assessment														
Workshop 1														
Workshop 2														
Workshop 3														
Certification Letter to EPA														
4.2 Emergency Response Plan														
Gap Review - Meeting 1														
Workshop 1														
Certification Letter to EPA														

EPA compliance deadline

Workshops

Water System Master Plan Task	2020										2021	
	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
1.1 Review Existing Model and Project Management												
Project Administration												
Project Planning, Data Needs List, Schedule												
Review Data and Hydraulic Model												
Kick-Off Meeting												
1.2 Model Creation/Update												
Update Hydraulic Model Pipes and Facilities												
Update Elevations												
Update Model Demands												
Update Control Strategy												
1.3 Field Testing												
Planning												
Testing												
Documentation												
1.4 Model Calibration												
Setup Calibration Scenario(s)												
Macro Calibration												
Micro Calibration												
2.1 Population and Community Growth Projections												
Population Projections												
Growth Development Projections/Land Use												
Meeting with City and Planners												
Draft Chapter												
2.2 Water Needs Analysis												
Review Historical Sales and Pumpage Data												
Determine Maximum Day and Peak Hour Factors												
Determine Demand Projections												
Discuss with City Staff												
Draft Chapter												
2.3 Existing Water System Facilities												
Review Available Data												
Draft Chapter												
2.4 Existing & Future Supply/Storage Evaluation												
Supply/Storage Evaluation												
Draft Chapter												
2.5 Water System Evaluation												
Modeling Evaluations												
Draft Chapter												
2.6 Reporting												
Workshop												
Address Comments on Draft Chapters												
3.1 Operational Improvements												
Evaluate Operational Strategies with Model												
Discuss with City Staff												
Draft Chapter												
3.2 Water System Improvement Planning												
Improvement Planning												
Draft Chapter												
Workshop												
3.3 20-Year Capital Improvements Plan												
Develop Capital Improvements Plan												
Review with City												
Draft Chapter												
3.4 Reporting												
Address Comments on Draft Chapters												
Present to City												

Task Schedule Workshop/Meeting

Modified STANDARD TERMS AND CONDITIONS

1. DEFINITIONS. In this section "Contracting Party" shall mean any party that is entering into this Agreement with the City of La Crosse. "La Crosse" shall mean the City of La Crosse. These definitions shall apply only to this section titled "Standard Terms and Conditions" and shall not replace, modify or supersede any definitions used in other sections of this Agreement.

2. STANDARD OF PERFORMANCE. Contracting Party agrees that the performance of the services, pursuant to the terms and conditions of this Agreement, shall be performed in a manner consistent with the degree of care and skill ordinarily exercised by members of the same professions currently practicing under similar circumstances providing like services. Contracting Party agrees to abide by all applicable federal, state and local laws, regulations and ordinances, and all provisions of this Agreement.

3. FULLY QUALIFIED. Contracting Party represents that all personnel engaged in the performance of the services set forth in this Agreement shall be fully qualified and shall be authorized or permitted under state and local law to perform the services.

4. SCOPE OF SERVICES. Contracting Party is required to perform, do and carryout in a satisfactory, timely, and professional manner the services set forth in this Agreement. The Contracting Party is required to furnish all services and labor necessary as indicated in this Agreement, including without limitation materials, equipment, supplies, and incidentals. The scope of services to be performed shall include, without limitation, those services set forth in this Agreement. La Crosse may from time to time request the Contracting Party to perform additional services which are not set forth in this Agreement. In the event that such a request is made, the performance of such services shall be subject to the terms, conditions and contingencies set forth in this Agreement.

5. CHANGE OF SCOPE. The scope of service set forth in this Agreement is based on facts known at the time of the execution of this Agreement, including, if applicable, information supplied by Contracting Party. Scope may not be fully definable during initial phases. As projects progress, facts discovered may indicate that the scope must be redefined. Parties shall provide a written amendment to this Agreement to recognize such change.

6. COMPENSATION. Contracting Party will be compensated by La Crosse for the services provided under this Agreement and subject to the terms, conditions and contingences set forth herein. Payments to Contracting Party for services rendered under this Agreement will be based on itemized invoices submitted on a monthly basis by the Contracting Party to La Crosse. These invoices must be itemized to include labor costs and the Contracting Party's direct expenses, including subcontractor costs. In addition, such invoices shall show the hours worked by the Contracting Party's staff and the amount of work completed as a percentage of the work to be performed. The final payment of the balance due the Contracting Party for the completed service shall be made upon completion and acceptance of the services performed by the Contracting Party under this Agreement.

7. TAXES, SOCIAL SECURITY, INSURANCE AND GOVERNMENT REPORTING. Personal income tax payments, social security contributions, insurance and all other governmental reporting and contributions required as a consequence of the Contracting Party receiving payment under this Agreement shall be the sole responsibility of the Contracting Party.

8. TERMINATION FOR CAUSE. If, through any cause, the Contracting Party shall fail to fulfill in a timely and proper manner its obligations under this Agreement, or if the Contracting Party shall violate any of the covenants, agreements, or stipulations of this Agreement, La Crosse shall thereupon have the right to terminate this Agreement by giving written notice to the Contracting Party of such termination and specifying the effective date, at least ten (10) days before the effective date of such termination. In such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, reports or other material related to the services performed by the Contracting Party under this Agreement for which compensation has been made or may be agreed to be made shall, at the option of La Crosse, become the property of La Crosse. Notwithstanding the foregoing, the Contracting Party shall not be relieved of liability to La Crosse for damages sustained by La Crosse by virtue of this Agreement by the Contracting Party, and La Crosse may withhold any payments to the Contracting Party for the purpose of setoff until such time as the exact amount of damages due to La Crosse from the Contracting Party is determined.

9. TERMINATION FOR CONVENIENCE. La Crosse may terminate this Agreement at any time and for any reason by giving written notice to the Contracting Party of such termination and specifying the effective date, at least ten (10) days before the effective date of such termination. If this Agreement is terminated by La Crosse pursuant to this provision, Contracting Party will be paid an amount which bears the same ratio to the total compensation as the services actually and satisfactorily performed bear to the total services of the Contracting Party covered by this Agreement, less payments for such services as were previously made. The value of the services rendered and delivered by Contracting Party will be determined by La Crosse.

10. SAFETY. Unless specifically included as a service to be provided under this Agreement, La Crosse specifically disclaims any authority or responsibility for general job site safety, or the safety of persons or property.

11. DELAYS. If performance of La Crosse's obligations is delayed through no fault of La Crosse, La Crosse shall be entitled to an extension of time equal to the delay.

12. OPINIONS OF COST. Any opinion of costs prepared by La Crosse is supplied for general guidance of Contracting Party only. La Crosse cannot guarantee the accuracy of such opinions as compared to actual costs to Contracting Party.

13. USE OF LA CROSSE PROPERTY. Any property belonging to La Crosse being provided for use by Contracting Party shall be used in a responsible manner and only for the purposes provided in this Agreement. No changes, alterations or additions shall be made to the property unless otherwise authorized by this Agreement.

14. INSURANCE. Contracting Party shall, at its sole expense, obtain and maintain in effect at all times during this Agreement the following insurance coverage:

1) Commercial General Liability Insurance of not less than $1,000,000.00 per occurrence for bodily injury, personal injury and property damage;
2) Automobile Liability Insurance of not less than $1,000,000.00 per occurrence for bodily injury and property damage covering all vehicles to be used in relationship to this Agreement;
3) Umbrella Liability Insurance of not less than $1,000,000.00 per occurrence for bodily injury, personal injury and property damage in excess of coverage carried for commercial general liability and automobile liability;
4) Professional Liability Insurance of not less than $1,000,000.00 per claim and annual aggregate; and
5) To the extent that Contracting Party employs any employees or as otherwise required by law, Workers' Compensation and Employees' Liability Insurance with Wisconsin statutory limits.

On the certificate of insurance, La Crosse shall be named as an additional insured on any General Liability Insurance, Automobile Insurance, and Umbrella Liability Insurance. The certificate must state the following: The City of La Crosse, its officers, agents, employees, and authorized volunteers shall be Additional Insureds. Prior to execution of the Agreement, Contracting Party shall file with La Crosse, a certificate of insurance signed by the insurer's representative evidencing the coverage required by this Agreement. Such evidence shall include an additional insured endorsement signed by the insurer's representative. Contracting Party shall provide La Crosse with a thirty (30) day notice prior to termination or cancellation of the policy. La Crosse reserves the right to require review and approval of the actual policy of insurance before it executes this Agreement.

15. INDEMNIFICATION. To the fullest extent allowable by law, Contracting Party hereby indemnifies and shall defend and hold harmless, at Contracting Party's expense, La Crosse, its elected and appointed officials, committee members, officers, employees or authorized representatives or volunteers, from and against any and all suits, actions, legal or administrative proceedings, claims, demands, damages, liabilities, losses, interest, attorney's fees (including in-house counsel legal fees), costs and expenses ~~of whatsoever kind, character or nature whether~~ arising ~~before, during, or after~~ completion of the Agreement hereunder and in any manner directly ~~or indirectly~~ caused or contributed to in whole or in part, by reason of any ~~act,~~ omission, fault, or ~~negligence, whether active or passive~~ of Contracting Party, or of anyone acting under its direction or control or on its behalf in connection with or incident to the performance of this Agreement, regardless if liability without fault is sought to be imposed on La Crosse. Contracting Party's aforesaid indemnity and hold harmless agreement shall not be applicable to any liability caused by the willful misconduct of La Crosse, its elected and appointed officials, officers, employees or authorized representatives or volunteers. Nothing in this Agreement shall be construed as La Crosse waiving its statutory limitation and/or immunities as set forth in the applicable Wisconsin Statutes or other applicable law. This indemnity provision shall survive the termination or expiration of this Agreement.

from

negligent act

Contracting Party shall reimburse La Crosse, its elected and appointed officials, officers, employees or authorized representatives or volunteers for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. ~~Contracting Party's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by La Crosse, its elected and appointed officials, officers, employees or authorized representatives or volunteers~~.

16. NO PERSONAL LIABILITY. Under no circumstances shall any trustee, officer, official, commissioner, director, member, partner or employee of La Crosse have any personal liability arising out of this Agreement, and Contracting Party shall not seek or claim any such personal liability.

17. INDEPENDENT CONTRACTORS. The parties, their employees, agents, volunteers, and representative shall be deemed independent contractors of each other and shall in no way be deemed as a result of this Agreement to be employees of the other. The parties, their employees, agents, volunteers, and representatives are not entitled to any of the benefits that the other provides for its employees. The parties shall not be considered joint agents, joint venturers, or partners.

18. GOVERNING LAW. This Agreement and all questions and issues arising in connection herewith shall be governed by and construed in accordance with the laws of the State of Wisconsin. Venue for any action arising out of or in any way related to this Agreement shall be exclusively in La Crosse County, Wisconsin. Each party waives its right to challenge venue.

19. JURY TRIAL WAIVER. The parties hereby waive their respective rights to a jury trial on any claim or cause of action based upon or arising from or otherwise related to this Agreement. This waiver of right to trial by jury is given knowingly and voluntarily by the parties and is intended to encompass individually each instance and each issue as to which the right to a trial by jury would otherwise accrue. Each party is hereby authorized to file a copy of this section in any proceeding as conclusive evidence of this waiver by the other party.

20. NOTIFICATION. Contracting Party shall:
(1) As soon as possible and in any event within a reasonable period of time after the occurrence of any default, notify La Crosse in writing of such default and set forth the details thereof and the action which is being taken or proposed to be taken by Contracting Party with respect thereto.
(2) Promptly notify La Crosse of the commencement of any litigation or administrative proceeding that would cause any representation and warranty of Contracting Party contained in this Agreement to be untrue.
(3) Notify La Crosse, and provide copies, immediately, upon receipt, of any notice, pleading, citation, indictment, complaint, order or decree from any federal, state or local government agency or regulatory body, asserting or alleging a circumstance or condition that requires or may require a financial contribution by Contracting Party or any guarantor or an investigation, clean-up, removal, remedial action or other response by or on the part of Contracting Party or any guarantor under any environmental laws, rules, regulations, ordinances or which seeks damages or civil, criminal or punitive penalties from or against Contracting Party or any guarantor for an alleged violation of any environmental laws, rules, regulations or ordinances.

21. SEVERABILITY. The provisions of this Agreement are severable. If any provision or part of this Agreement or the application thereof to any person or circumstance shall be held by a court of competent jurisdiction to be invalid or unconstitutional for any reason, the remainder of this Agreement and the application of such provision or part thereof to other persons or circumstances shall not be affected thereby.

22. ASSIGNMENT, SUBLET, AND TRANSFER. Contracting Party shall not assign, sublet, or transfer its interests or obligations under the provisions of this Agreement without the prior written consent of La Crosse. This Agreement shall be binding on the heirs, successors, and assigns of each party hereto. Contracting Party shall provide not less than forty-five (45) days advance written notice of any intended assignment, sublet or transfer.

23. NO WAIVER. The failure of any party to insist, in any one or more instance, upon performance of any of the terms, covenants, or conditions of this Agreement shall not be construed as a waiver, or relinquishment of the future performance of any such term, covenant, or condition by any other party hereto but the obligation of such other party with respect to such future performance shall continue in full force and effect.

24. SUBCONTRACTING. None of the services to be performed under this Agreement shall be subcontracted without the prior written approval of La Crosse. If any of the services are subcontracted, the performance of such services shall be specified by written contract and shall be subject to each provision of this Agreement. Contracting Party shall be as fully responsible to La Crosse for the acts and omissions of its subcontractors and of person either directly or indirectly employed by them, as it is for acts and omissions of persons directly employed by it.

25. CONFLICTS OF INTEREST. Contracting Party covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services hereunder. Contracting Party further covenants that in the performance of this Agreement no person having any conflicting interest shall be employed. Any interest on the part of Contracting Party or its employee must be disclosed to La Crosse

26. NON-DISCRIMINATION. Pursuant to law, it is unlawful and Contracting Party agrees not to willfully refuse to employ, to discharge, or to discriminate against any person otherwise qualified because of race, color, religion, sex, sexual orientation, age, disability, national origin or ancestry, lawful source of income, marital status, creed, or familial status; not to discriminate for the same reason in regard to tenure, terms, or conditions of employment, not to deny promotion or increase in compensation solely for these reasons; not to adopt or enforce any employment policy which discriminates between employees on account of race, color, religion, sex, creed, age, disability, national origin or ancestry, lawful source of income, marital status or familial status; not to seek such information as to any employee as a condition of employment; not to penalize any employee or discriminate in the selection of personnel for training, solely on the basis of race, color, religion, sex, sexual orientation, age, disability, national origin or ancestry, lawful source of income, marital status, creed or familial status.

Contracting Party shall include or cause to be included in each subcontract covering any of the services to be performed under this Agreement a provision similar to the above paragraph, together with a clause requiring such insertion in further subcontracts that may in turn be made.

27. POLITICAL ACTIVITIES. Contracting Party shall not engage in any political activities while in performance of any and all services and work under this Agreement.

28. GOVERNMENTAL APPROVALS. Contracting Party acknowledges that various of the specific undertakings of La Crosse described in this Agreement may require approvals from the City of La Crosse Council, City of La Crosse bodies, and/or other public bodies, some of which may require public hearings and other legal proceedings as conditions precedent thereto. Contracting Party further acknowledges that this Agreement is subject to appropriation by the La Crosse Common Council. La Crosse's obligation to perform under this Agreement is conditioned upon obtaining all such approvals in the manner required by law. La Crosse cannot assure that all such approvals will be obtained, however, it agrees to use good faith efforts to obtain such approvals on a timely basis.

29. ENTIRE AND SUPERSEDING AGREEMENT. This writing, all Exhibits hereto, and the other documents and agreements referenced herein, constitute the entire Agreement between the parties with respect to the subject matter hereof, and all prior agreements, correspondences, discussions and understandings of the parties (whether written or oral) are merged herein and made a part hereof. This Agreement, however, shall be deemed and read to include and incorporate such minutes, approvals, plans, and specifications, as referenced in this Agreement, and in the event of a conflict between this Agreement and any action of La Crosse, granting approvals or conditions attendant with such approval, the specific action of La Crosse shall be deemed controlling. To the extent that any terms and conditions contained in this Agreement, all Exhibits hereto, and the other documents and agreement referenced herein conflict with these Standard Terms and Conditions, the Standard Terms and Conditions shall take precedence.

30. AMENDMENT. This Agreement shall be amended only by formal written supplementary amendment. No oral amendment of this Agreement shall be given any effect. All amendments to this Agreement shall be in writing executed by both parties.

31. IMPLEMENTATION SCHEDULE AND TIME OF THE ESSENCE. Any and all phases and schedules which are the subject of approvals, or as set forth herein, shall be governed by the principle that time is of the essence, and modification or deviation from such schedules shall occur only upon approval of La Crosse. The Mayor, or in the Mayor's absence, the Council President, shall have the ability to postpone any deadline listed herein, up to a maximum of ninety (90) days.

32. TIME COMPUTATION. Any period of time described in this Agreement by reference to a number of days includes Saturdays, Sundays, and any state or national holidays. Any period of time described in this Agreement by reference to a number of business days does not include Saturdays, Sundays or any state or national holidays. If the date or last date to perform any act or to give any notices is a Saturday, Sunday or state or national holiday, that act or notice may be timely performed or given on the next succeeding day which is not a Saturday, Sunday or state or national holiday.

33. NOTICES. Any notice, demand, certificate or other communication under this Agreement shall be given in writing and deemed effective: a) when personally delivered; b) three (3) days after deposit within the United States Postal Service, postage prepaid, certified, return receipt requested; or c) one (1) business day after deposit with a nationally recognized overnight courier service, addressed by name and to the party or person intended as follows:

To the City:	Attn. City Clerk City of La Crosse 400 La Crosse Street La Crosse, WI 54601	Copy to:	Attn. City Attorney City of La Crosse 400 La Crosse Street La Crosse, WI 54601

Contracting party shall identify in writing and provide to La Crosse the contact person and address for notices under this Agreement.

34. INCORPORTION OF PROCEEDINGS AND EXHIBITS. All motions adopted, approvals granted, minutes documenting such motions and approvals, and plans and specifications submitted in conjunction with any and all approvals as granted by La Crosse, including but not limited to adopted or approved plans or specifications on file with La Crosse, and further including but not limited to all exhibits as referenced herein, are incorporated by reference herein and are deemed to be the contractual obligation of Contracting Party whether or not herein enumerated.

35. ACCESS TO RECORDS. Contracting Party, at its sole expense, shall maintain books, records, documents and other evidence pertinent to this Agreement in accordance with accepted applicable professional practices. La Crosse, or any of its duly authorized representatives, shall have access, at no cost to La Crosse, to such books, records, documents, papers or any records, including electronic, of Contracting Party which are pertinent to this Agreement, for the purpose of making audits, examinations, excerpts and transcriptions.

36. PUBLIC RECORDS LAW. Contracting Party understands and acknowledges that La Crosse is subject to the Public Records Law of the State of Wisconsin. As such, Contracting Party agrees to retain all records as defined by Wisconsin Statute § 19.32(2) applicable to this Agreement for a period of not less than seven (7) years after the termination or expiration of this Agreement. Contracting Party agrees to assist La Crosse in complying with any public records request that La Crosse receives pertaining to this Agreement. Additionally, Contracting Party agrees to indemnify and hold harmless La Crosse, its elected and appointed officials, officers, employees, and authorized representatives for any liability, including without limitation, attorney fees related to or in any way arising from Contracting Party's actions or omissions which contribute to La Crosse's inability to comply with the Public Records Law. In the event that Contracting Party decides not to retain its records for a period of seven (7) years, then it shall provide written notice to La Crosse whereupon La Crosse shall take custody of said records assuming such records are not already maintained by La Crosse. This provision shall survive the termination of this Agreement.

37. CONSTRUCTION. This Agreement shall be construed without regard to any presumption or rule requiring construction against the party causing such instrument to be drafted. This Agreement shall be deemed to have been drafted by the parties of equal bargaining strength. The captions appearing at the first of each numbered section of this Agreement are inserted and included solely for convenience but shall never be considered or given any effect in construing this Agreement with the duties, obligations, or liabilities of the respective parties hereto or in ascertaining intent, if any questions of intent should arise. All terms and words used in this Agreement, whether singular or plural and regardless of the gender thereof, shall be deemed to include any other number and any other gender as the context may require.

38. NO THIRD-PARTY BENEFICIARY. Nothing contained in this Agreement, nor the performance of the parties hereunder, is intended to benefit, nor shall inure to the benefit of, any third party.

39. COMPLIANCE WITH LAW. The parties shall comply in all material respects with any and all applicable federal, state and local laws, regulations and ordinances.

40. FORCE MAJEURE. La Crosse shall not be responsible to Contracting Party for any resulting losses and it shall not be a default hereunder if the fulfillment of any of the terms of this Agreement is delayed or prevented by revolutions or other civil disorders, wars, acts of enemies, strikes, fires, floods, acts of God, adverse weather conditions, legally required environmental remedial actions, industry-wide shortage of materials, or by any other cause not within the control of the party whose performance was interfered with, and which exercise of reasonable diligence, such party is unable to prevent, whether of the class of causes hereinabove enumerated or not, and the time for performance shall be extended by the period of delay occasioned by any such cause.

41. GOOD STANDING. Contracting Party affirms that it is a company duly formed and validly existing and in good standing under the laws of the State of Wisconsin and has the power and all necessary licenses, permits and franchises to own its assets and properties and to carry on its business. Contracting Party is duly licensed or qualified to do business and is in good standing in the State of Wisconsin and in all other jurisdictions in which failure to do so would have a material adverse effect on its business or financial condition.

42. AUTHORITY. The persons signing this Agreement warrant that they have the authority to sign as, or on behalf of, the party for whom they are signing.

43. EXECUTION OF AGREEMENT. Contracting Party shall sign and execute this Agreement on or before sixty (60) days of its approval by the La Crosse Common Council, and Contracting Party's failure to do so will render the approval of the Agreement by the La Crosse Common Council null and void unless otherwise authorized.

44. COUNTERPARTS. This Agreement may be executed in one or more counterparts, all of which shall be considered but one and the same agreements and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party.

45. SURVIVAL. All express representations, indemnifications and limitations of liability included in this Agreement will survive its completion or termination for any reason.

Revised: July 2011

AECOM Technical Services, Inc.	**CLIENT: City of La Crosse, WI**
Signature	Signature
Thomas J. Holtan, P.E.	Bernard N Lenz, PE
Printed Name	Printed Name
Associate Vice President	Utility Manager
Printed Title	Printed Title
March 11, 2020	March 11, 2020
Date	Date
Address:	Address:
200 Indiana Avenue Stevens Point, WI 54481	400 La Crosse Street La Crosse, WI 54601

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