

## ASSET MANAGER

### CLASS DESCRIPTION

#### General Responsibilities:

This is responsible, professional technical work in the Asset Management Program development, implementation, management, and coordination for the Water Utility. This position will lead a cross functional Asset Management Team drawing from all sections of the Utility in the planning, development, implementation, and maintenance of an asset management program. The Asset Management Program will develop processes and procedures to ensure the Utility's infrastructure system meets established service goals while minimizing total life-cycle cost. Working under the direction of the Principal Engineer and the Computer Mapping/GIS Coordinator, this position has responsibility for initial development and implementation of the Utility's Asset Management Program.

#### Examples of Duties and Responsibilities:

Administer and maintain the Water Utility Asset Management Program. Organize and lead a cross functional team responsible for developing, building, and refining the Asset Management Program for Madison Water Utility. Document the goals of the Utility asset management program, identify the steps for improvement, prioritize improvement initiatives, and provide a framework for measuring progress and success.

Define system wide operational goals. Identify and evaluate options and cost consequences of various operational goals and monitor whether the program achieves desired operational goals. Recommend corrective actions when necessary. Ensure the results of Asset Management Program implementations meet the needs of strategic investment planning for Madison Water Utility. Evaluate and recommend modifications to asset management processes and procedures.

Develop processes and procedures to plan for and finance repair and replacement of Utility infrastructure that seeks to minimize the life cycle cost of all assets while continuously delivering the service levels customers desire and regulators require at an acceptable risk to the organization.

Develop, document, and periodically update the program for utility system condition assessment data collection and organization. Oversee field-based condition assessment program activities to assure that field staff is complying with program data collection requirements. Design and implement research-based condition assessment and data evaluation programs (data mining of historical records, GIS, etc.). Develop a buried asset rating program that will simply communicate buried asset condition and reinvestment need to other City Departments, officials, boards, and neighborhood organizations.

Define customer service level goals. Identify and evaluate options and cost consequences of various service level goals. Monitor whether the program achieves desired customer service levels. Recommend corrective actions to senior managers, when necessary. Develop annual program for infrastructure condition assessment activities, using asset management models and tools developed under the program, and coordinate with other city initiatives such as overlay or Transportation CIP projects.

Develop, review and revise program procedures and criteria for identifying and ranking capital renewal and replacement (R&R) projects. Use cost/benefit analyses, consequence of failure costs, failure probabilities, and total life cycle cost considerations. Identify and prioritize R&R projects for implementation. Coordinate project prioritization and planning with engineering staff.

Analyze program data to prepare statistical and other engineering reports, forecasts and correspondence to demonstrate program progress; measure against objectives; and recommend changes. Develop, review and revise critical facility definitions and identify critical facilities based on those criteria. Provide periodic status reports of Asset Management Program activities and progress for utility leadership and Water Utility Board. Monitor the progress and expenditures of Capital Investment Program infrastructure renewal and replacement projects and evaluate against forecast fiscal resource requirements.

Coordinate information with Utility finance staff for long-term financial forecasting, and budget and utility rate design and development. Assist with the update to the annual capital 5-year budget projections. Assist in development of engineering standards which reduce life cycle cost of utility system ownership. Provide technical support to other divisions and departments in support of same objective. Work with engineering staff to update the Utility water master plan.

Review, evaluate, recommend, and implement asset management program software. Review the use of data from the Utilities Computerized Maintenance Management System (CMMS) to inform maintenance and condition assessment activities. Analyze asset management data storage and reporting requirements. Evaluate options for improved efficiency of data management. Recommend and implement improvements. Review current trends and developments in asset management software and data management; recommend improvements or enhancements as feasible.

Assist with implementing risk-based preventive maintenance programs for operable assets such as pump stations, reservoirs, and valves. Monitor repair costs and investment, evaluate asset life expectancy, and develop programs to optimize asset life cycle cost. Evaluate the consequence of failure and business risk exposure of each asset and develop a maintenance and replacement program based on individual facility conditions and the criticality of the asset.

Promote Asset Management concepts and practices to staff, Water Utility Board, Common Council, and other community organizations. Maintain regular contacts with other utilities

and industry groups to share information and keep informed on the latest developments relative to Utility Asset Management. Retain, select, hire and manage limited term employees (LTEs) and outside consultants to assist with asset management program as necessary.

Perform related work as required.

## QUALIFICATIONS

### **Knowledge, Skills and Abilities:**

Thorough knowledge of established civil engineering principles, practices, methods, project management, and techniques, particularly for utility system renewal and replacement. Thorough knowledge of and ability to use computer software applicable to the duties of the position, including computer terminology, engineering applications, CMMS, GIS, relational databases, and database reporting applications. Thorough knowledge of tracking, recording, and evaluating performance metrics to advance asset management program objectives. Working knowledge of statistical analysis principles; experience with life-cycle costing and triple-bottom-line analysis. Knowledge of the principles and objectives of asset management with respect to the operation of a public utility. Knowledge of Water Environment Research Foundation's (WERF) Sustainable Infrastructure Management Program Learning Environment (SIMPLE). Knowledge of EPA's Sustainable Infrastructure initiative. Knowledge of utility finance, budgeting, and long term planning. Knowledge of EUM (Effective Utility Management). Knowledge of typical utility policies, practices, procedures, governing laws, ordinances and regulations. Ability to organize, analyze, interpret, and evaluate engineering problems to develop and recommend practical, cost-effective solutions. Ability to apply quantitative, analytical, technical, and critical thinking skills. Ability to work cooperatively across organizational divisions to achieve program objectives. Ability to successfully establish and maintain a working environment conducive to positive morale, individual style, quality, innovation, and teamwork. Ability to work and thrive in a team environment. Ability to organize and facilitate meetings with diverse stakeholders. Ability to communicate effectively both orally and in writing. Ability to convey technical information succinctly, accurately, and comprehensively to non-engineering audiences. Ability to develop and present program objectives, progress and status to senior management, Water Utility Board, Common Council, or the general public. Ability to maintain good working relationships with staff, members of other agencies and the general public. Ability to maintain adequate attendance.

### **Training and Experience:**

Generally, positions in this classification will require:

Four years of experience performing progressively responsible technical work which included either working with or developing and implementing an asset management system or working as a utility planner or engineer. Such experience will normally be gained after graduation from a four-year accredited college or university with a Bachelor of Science or

equivalent in Engineering, Municipal Planning, Utility Management, GIS, Public Administration, or other closely related field. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

Specific training and experience requirements will be established at the time of recruitment.

**Special Requirements:**

Possession of a valid driver's license or the ability to meet the transportation requirements of the position.

**Physical Requirements:**

Work will generally be performed in an office environment, using standard office equipment. However, incumbents will be expected to work safely and efficiently on public works construction sites. Employees in this position will be expected to have the ability to stand for long periods of time, walk over rough and/or uneven terrain, work in inclement weather conditions (cold, hot, excessive humidity, rain, or sun), tolerate loud noises, dust, and pollen. Work may occasionally require the employee to climb, balance, bend, squat, kneel, crouch, and/or crawl. Employees will be expected to routinely lift 30 lbs (survey equipment, GPS and other mobile devices) and carry it over rough terrain for 100 yards as needed when working in the field, and will be expected to occasionally lift 75 lbs (manhole cover) to the waist. .

<b>Department/Division</b>	<b>Comp. Group</b>	<b>Range</b>
Water Utility	18	10

Approved: \_\_\_\_\_  
Brad Wirtz  
Human Resources Director

Date