



WEST DES MOINES WATER WORKS BOARD OF TRUSTEES MEETING COMMUNICATION

DATE: April 19, 2023

ITEM:

5. Recommendations from Committees
 - a. Personnel and Compensation Committee
 1. Motion – Ratifying the Job Description for Civil Engineer I
 2. Motion – Ratifying the Job Description for Civil Engineer II

FINANCIAL IMPACT:

None.

SUMMARY:

These actions will approve a position description for Civil Engineer I and Civil Engineer II. The job description is being used in the recruitment of a new Civil Engineer to replace Shad Haidsiak who resigned in March.

BACKGROUND:

As positions open within Water Works, staff take the opportunity to review and update the job description. Staff have added the Civil Engineer II job description to give more clarity in the path for an engineer who becomes licensed or who is hired with a PE license. The Civil Engineer II/Engineering Coordinator role is similar to positions in our Distribution and Water Production Departments. The position descriptions have been reviewed and approved by the Personal and Compensation Committee.

RECOMMENDED ACTION BY THE BOARD OF TRUSTEES:

Concur with the recommendation of the Personnel and Compensation Committee and ratify the Job Descriptions for Civil Engineer I and Civil Engineer II.
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Prepared by: William J. Mabuce

Approved for Content by: Clara Murphy



WEST DES MOINES WATER WORKS POSITION DESCRIPTION

Position Title: Civil Engineer I	Department: Engineering
Supervisor: Engineering Project Manager	Bargaining Unit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Category: <input checked="" type="checkbox"/> Exempt <input type="checkbox"/> Non-Exempt	Supervises: N/A

Summary Description:

Under general supervision, manages water infrastructure projects from concept/design through construction; prepares, reviews, and modifies civil engineering plan specifications for such projects; works with contractors and staff on public works-related topics; responds to general and/or project-specific inquiries from customers; assists in coordination of locate requests, performs engineering, distribution system modeling and GIS-related analysis, graphics, and mapping. Performs related work as required.

Duties and Responsibilities:

- Updates and utilizes Geographic Information Systems (GIS) and other resources to perform analysis of engineering-related data. Maintains and updates the water distribution GIS model. Serves as main point of contact for internal and external users of the WDMWW GIS Database.
- Coordinates Water Works response to Iowa One Call Design Information Requests.
- Reviews City right-of-way permits and provides timely comments on potential impacts to WDMWW infrastructure.
- Attends weekly City Development Review meeting and provides timely comments on potential projects.
- Assists in performing in-house budgets, design, detail, and drafting of capital improvement projects.
- Responds to general public inquiries regarding Water Works projects and infrastructure.
- Maintains electronic and physical files of engineering information.
- Provides field support to Engineering Technicians and Utility Locator.
- Maintains a positive working relationship with supervisor and coworkers.
- Attends meetings as required.
- Performs other duties as assigned.
- Performs field inspections, surveys and studies, provides departmental representation as needed.

Licenses and Certifications:

- Possess and maintain a valid Iowa Driver's license or equivalent mobility.
- Possess and maintain an Engineer Intern (EI) certificate or ability to obtain within 12 months of Employment.
- Iowa DNR Grade 2 Water Distribution Operator's certificate preferred but not required.

Education/Experience:

- Bachelor’s degree in civil engineering, construction engineering, or closely related field.
- One year in civil engineering, drafting, surveying, design work and/or construction management.

Skills:

- Proficiency with PC’s and computer software and applications, including Microsoft Outlook, Word, Excel, PowerPoint and Adobe Acrobat / Bluebeam Revu
- Knowledge of Computer Aided Drafting (CAD) drafting methods; knowledge of Geographic Information Systems (GIS) technology; knowledge of the principles and practices of drafting and mapping; knowledge of the methods of surveying; knowledge of materials testing;
 - Preference may be given for experience in MicroStation, InfoWater, and ArcMap
- Knowledge of local, state and federal regulations concerning the design and construction of public works and/or utility projects
- Accurate mathematical skills.
- Effective oral and written communication skills.
- Ability to work efficiently with little direct supervision, take initiative.
- Sound judgment, problem solving, and decision-making abilities.
- Ability to convey technical concepts to persons with limited technical knowledge. Ability to understand and follow verbal and written instructions.
- Ability to establish and maintain effective working relationships with supervisors, co-workers and other WDMWW employees.
- Ability to represent the WDMWW in a professional manner to citizens and outside agencies.

Working Conditions:

- Primarily Office Environment. Occasional Field Visits.
- Long periods of sitting, standing, and walking over uneven terrain.
- Constant talking, hearing, near and far sight acuity, color vision, field of vision, concentration, handling, dexterity, and good judgment.
- Frequent stooping, handling, and writing ability.
- Occasional exposure to traffic, noise and hazards associated with construction sites.
- Occasional exposure to weather, including heat, cold, rain, snow, and wind.
- Intermittent balancing, kneeling, crouching, and reaching.
- Ability to routinely lift, carry, push and/or pull 30 pounds. Occasional ability to do the same for up to 50 pounds.

Note:

This position description should not be construed to imply that these requirements are the exclusive standards of the position. Incumbents will follow any other instructions and perform any other related duties as may be required. The Water Works may revise this position description at any time. The position description is not to be considered as a contract of employment, as this position is and remains at-will.

Approvals:

Incumbent _____
Signature

Date _____

Supervisor _____
Signature

Date _____

Revised: April 4, 2023



WEST DES MOINES WATER WORKS POSITION DESCRIPTION

Position Title:	Civil Engineer II (Engineering Coordinator)	Department:	Engineering
Supervisor:	Engineering Project Manager	Bargaining Unit:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Category:	<input checked="" type="checkbox"/> Exempt <input type="checkbox"/> Non-Exempt	Supervises:	up to 4 employees

Summary Description:

Under general supervision, manages water infrastructure projects from concept/design through construction; prepares, reviews and modifies civil engineering plan specifications for such projects; works with contractors and staff on public works-related topics; responds to general and/or project-specific inquiries from customers; assists in coordination of locate requests, performs engineering, distribution system modeling and GIS-related analysis, graphics and mapping. Performs related work as required.

Duties and Responsibilities:

- Updates and utilizes Geographic Information Systems (GIS) and other resources to perform analysis of engineering-related data. Maintains and updates the water distribution GIS model. Serves as main point of contact for internal and external users of the WDMWW GIS Database.
- Coordinates Water Works response to Iowa One Call Design Information Requests.
- Reviews City right-of-way permits and provides timely comments on potential impacts to WDMWW infrastructure.
- Represent WDMWW at weekly City Development Review meeting, coordinates WDMWW response, and provides timely comments on potential projects.
- Performs budgeting, design, detail, and drafting of in-house projects.
- Assists with identification, preparation, and budgeting for Capital Improvement projects.
- Responds to public inquiries regarding Water Works projects and infrastructure.
- Maintains electronic and physical files of engineering information.
- Supervises and provides field support to Engineering Technicians and Utility Locator.
- Maintains a positive working relationship with supervisor, subordinates, and coworkers.
- Attends meetings as required.
- Performs other duties as assigned.
- Manages Water Works projects as assigned.
- Prepares, signs, and seals plans and specifications for Water Works projects.

Licenses and Certifications:

- Possess and maintain a valid Iowa Driver's license or equivalent mobility.
- Civil Engineer II – Possess and maintain an Iowa Professional Engineering License or ability to receive reciprocity within 6 months of Employment.
- Iowa DNR Grade 2 Water Distribution and Grade 2 Water Treatment Operator's certificates preferred but not required.

Education/Experience:

- Bachelor’s degree in civil engineering, construction engineering, or closely related field.
- Four years in civil engineering, drafting, surveying, design work and/or construction management.

Skills:

- Proficiency with PC’s and computer software and applications, including Microsoft Outlook, Word, Excel, PowerPoint and Adobe Acrobat / Bluebeam Revu
- Proficiency with Computer Aided Drafting (CAD) drafting methods; significant knowledge of Geographic Information Systems (GIS) technology; significant knowledge of the principles and practices of drafting and mapping; knowledge of the methods of surveying; knowledge of materials testing;
 - Preference may be given for experience in MicroStation, InfoWater, and ArcMap
- Knowledge of local, state and federal regulations concerning the design and construction of public works and/or utility projects
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