



CITY OF ANN ARBOR, MICHIGAN  
POSITION DESCRIPTION

## Civil Engineer V – WTP/WWTP

<b>Job Code:</b> 403900	
<b>Service Area:</b> Public Services	
<b>Service Unit:</b> WTP/WWTP	
<b>Salary Grade (Non-Union):</b> 10	<b>Pay Scale (Union):</b> <b>CP:</b> Choose an item.
<b>Exemption Status:</b> Exempt	
<b>Accountable To:</b> WTP/WWTP Manager	
<b>Union/Non-Union:</b> Non-Union	
<b>Union Name:</b> N/A	
<b>Essential Driver:</b> Yes	
<b>Telecommuting Eligible:</b> Hybrid	
<b>Responsible for supervising the following positions:</b> N/A	
<b>Description Prepared By</b> M. Maciejewski, K. Sanders, A. Warrow, and G. Wiczorek 11/28/2023 HR Review – CL, HK 12/14/2023 Legal Review of Physical Requirements – MR 5/18/2023	

**Date Position Description Finalized**

1/8/2024

### **Role Summary**

Assignments at this level require extensive progressive experience in the application of civil engineering principles, practices and engineering. Has full technical responsibility for interpreting, organizing, executing and coordinating assignments. Plans and develops engineering projects concerned with unique or controversial problems. This involves exploration of subject area, definition of scope and selection of problems for investigation, and development of innovative concepts and approaches. Maintains liaison with individuals, units and organizations and acts independently on technical matters pertaining to his/her assignments.

### **Duties**

Duties are performed under the general supervision of the Water Treatment Plant/Wastewater Treatment Plant Manager or designee and may include the following:

#### Essential Duties

Supervision received is essentially administrative, with assignments given in terms of broad general objectives and limits. Plans, develops, coordinates, and directs large projects of major scope and importance. Leads and coordinates public involvements in the projects. Keeps abreast of new engineering methods and developments affecting the City for the purpose of recommending changes in emphasis of programs or new programs warranted by such developments. Performs project management, civil engineering design and oversight, construction contract administration, construction observation and other related work.

Plans, schedules, conducts, and coordinates detailed phases of the engineering work. Performs work that involves conventional engineering practice but may include a variety of complex features such as confirming design requirements, unsuitability of conventional materials, and difficult coordination requirements. Work requires a broad knowledge of precedents in the project assignment area and a good knowledge of principles and practices of related specialties.

This position is responsible for leading projects and engineering support for the water or wastewater treatment services, including but not limited to pumping stations, treatment plants, sewage lift stations, storage facilities, and dams. The plant engineer ensures that the proper permits are obtained for all construction related activities either from EGGLE, WCWRC or other jurisdictions. The engineer is stationed at the water or wastewater plant and may be the sole staff engineer at the plant.

The plant engineer oversees the work of consulting engineers and serves as the contract administrator for projects and additional engineering or construction management services.

Plant engineer may also oversee design and construction of maintenance related projects and/or provide engineering support to both Plant operations and maintenance staff.

Plant engineer is responsible for executing work required by regulators such as EGGLE, FERC and other agencies.

Plant engineer may be responsible for managing or contributing to the Capital Improvement Plan.

Plant engineer is responsible for annual budget and spending performance metrics.

Related Work

Plans and organizes the work of staff engineers or project technicians. Evaluates progress and results obtained and recommend major changes to achieve overall objectives. Designs and oversees major engineering projects and develops new methods and approaches to uncommon projects. Closely reviews work of the consultants and all others in the project team and assume responsibility for correct and timely completion of the assignments.

**Knowledge of:** (position requirements at entry)

- Legal aspects of professional service agreements and construction contracts
- Local government administration and City and State codes
- Michigan Safe Drinking Water Act(Act 399) requirements
- Michigan Clean Water Act Requirements including NPDES permitting.
- State and Federal Drinking Water drinking water standards
- Leading technical teams
- Technical report preparation
- Preparing resolutions for Council
- General knowledge of multiple disciplines.
- Project management techniques for budget, schedule and QA/QC control

**Skills and Ability to:**(position requirements at entry)

- Preparing Requests for Proposals
- Contract administration
- Project Management
- Construction administration
- Quality Control and Quality Assurance
- Engineering practices and principles
- Public infrastructure design, construction and budget administration
- Technical report preparation
- Grant applications and proposals preparation
- Strong ability to identify problems and find solutions
- Strong oral and written communication, with the ability to understand, follow and communicate oral and written policies, procedures and instructions
- Strong Customer service orientation
- Teamwork and leadership
- Using computers and applicable software

**Equipment**

Passenger vehicle, computers, printers, scanners, field and office measurement tools, cell phones, and miscellaneous office equipment

**Education, Training and Experience** (position requirements at entry)

Required:

- Bachelor's Degree in Civil Engineering from an accredited four-year college or university with additional training in engineering, business management or legal aspects of construction process
- Professional Engineering License in the State of Michigan (PE)

- Minimum of 13 years of progressive civil engineering and engineering practice, including at least 7 years experience working with water or wastewater treatment plants, pumping stations, hydroelectric power or similar facilities
- The City of Ann Arbor will consider an alternative combination of education and experience.

**Licensing Requirements** (position requirements at entry)

- Professional Engineering License in the State of Michigan (PE)

**Physical Requirements**

The physical ability to climb, balance, stoop, kneel, crouch, crawl, reach, stand, walk, push, pull, lift, grasp, feel, talk, hear, see, and perform repetitive motions.

Essential duties require the mental and/or physical ability to: work in a standard office environment; read fine print on blueprints and display terminals; converse by telephone, two-way radio, in person, or around the noise of heavy construction equipment; move across rough terrain and bridge scaffolding; climb into and out of sewers and trenches, confined space entry, climb ladders, and several flights of stairs; use drafting instruments, calculators, and personal computers; and strength to lift and carry up to 30 pounds. The work requires the ability to distinguish colors and to hear audible alarms. Incumbents may be subject to potentially hazardous physical conditions, atmospheric conditions, extreme temperatures, intense noise, and/or vehicle traffic.

Light Work: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or a small amount of force constantly to move objects.

*The physical demands described here are representative of those that may be met by an employee to successfully perform the essential duties of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.*