



Tualatin Valley Water District



Full-Time Job Opening: Engineering Associate

Salary Grade 7: start \$32.88 to midpoint \$41.10 to top \$49.33 (depending on qualifications)

PERS/OPSRP members are subject to a mandatory 6% employee contribution.

Non-members will be eligible after 6 full-calendar months of service.

Opens: January 17, 2019

Closing Date: February 14th by 11 a.m.

Please see the attached job description for more information specific to this position.

Required Materials:

- 1) Cover letter
- 2) Resume
- 3) TVWD application
- 4) Answers to the supplemental questions
- 5) If claiming Veteran's preference, you must submit a copy of your Federal DD Form 214/215 or a veteran's disability preference letter from the US Department of Veterans Affairs in order to be considered.

Supplemental Questions: Please answer the following questions, limit your response to 1 page double sided.

Applications received after the filing deadline or without responses to the supplemental questions will not be considered.

1. Describe your experience with the design and management of engineering projects. What roles have you played in public infrastructure improvement projects?
2. Describe your understanding and experience with water conveyance systems and components, include experience with design, operation, and application of design standards for potable water systems.
3. Describe your experience and level of expertise with different technical software programs that are typically used in engineering, including drafting and hydraulic modeling programs.

Submission of Materials: Various ways to apply:

- Email: tvwdjobs@tvwd.org; or
- Fax: (503) 356-3190; or
- Mail: 1850 SW 170th Ave, Beaverton OR 97003

All materials must be received by **February 14th by 11 a.m.** See our website for more information: www.tvwd.org.

Tualatin Valley Water District is an Equal Opportunity Employer and gives preference points to qualified veterans.

Tualatin Valley Water District



Delivering the Best Water  Service  Value

Title: Engineering Associate

Job Grade: 7

Reporting to: Engineering Division Manager

Department: Engineering and Operations

Tualatin Valley Water District believes that each employee makes a significant contribution to our success. That contribution should not be limited by the assigned responsibilities. Therefore, this job description is designed to outline primary duties, qualifications and job scope, but not limit the incumbent nor the organization to just the work identified. It is our expectation that each employee will offer his/her services wherever and whenever necessary to achieve our mission to provide our community quality water and customer service.

Overall Purpose of the Job: To serve as a staff engineer involved in a variety of activities including design, managing capital improvement projects, development plan review, hydraulic modeling and analysis, customer interface and answering questions about District standards, field testing and data entry, field inspections and investigations related to system operations and construction, and coordination with other District staff and crews. All functions are performed under the direction and final approval of the District's Chief Engineer or designee. The Engineering Associate applies basic engineering knowledge to the planning, design, and construction oversight of maintenance and projects pertaining to the District's infrastructure and private development.

Essential Job Functions:

- Work under the direction of a Professional Engineer to prepare engineering plans and specifications for small to mid-sized capital improvements and maintenance projects; research and plan water system and facility improvements; coordinate activities for surveying, mapping, preparation of contract documents, and for application and acquisition of required permits.
- Prepare and review project designs to comply with District objectives, rules and regulations, and standards.
- Manage capital improvement projects to repair, replace, and construct new District infrastructure, including managing consultant and construction contracts. Review and approve monthly invoices and pay requests.
- Use computer aided drafting (AutoCAD) to prepare design drawings, standard details, site plans, and other products to support Engineering and Operations Department projects and activities.
- Provide support to engineers on various engineering and construction projects and prepare engineering calculations and analyses.
- Use computerized hydraulic models to support engineering calculations and designs. Provide modeling support for other district functions to assist in prioritization of tasks. Support district operations by providing modeling support and analysis for summer water supply operations.
- Review and analyze construction projects planned by other agencies for potential impact on District facilities and operations; confer with personnel from other agencies regarding current and proposed construction projects; identify and resolve problems in compatibility between other agency systems and District systems.
- Gather field data such as identifying other existing utilities along water main design routes; collect mapping information using survey and/or Global Positioning System (GPS) methods. Use the District's GIS to gather information for use on various projects.
- Provide customer service related to plan review, meter sales, service development charges (SDCs) and other fees, and answering customer questions.
- Review developer plans for conformance with District standards and monitor and review progress of developer projects. Prepare contracts for the purchase of meters and payment of SDCs for large meters.
- Provide technical oversight and assign work to engineering technicians and engineering interns including identification of project assignments, work planning, development of design criteria, and oversight of technical details.

- Provide technical assistance in support of project management tasks on various engineering and construction projects; prepare project schedules and track project progress against schedule; arrange, facilitate and attend pre-design and pre-construction meetings; review and approve material submittals; coordinate review and approval of requests for information and change orders; prepare, review and approve work orders; conduct field inspections; develop and analyze project alternatives; and monitor completed projects in case of needed warranty repairs.
- Coordinate with District engineering staff and contractors, consultants, other utilities and other agencies; review work by outside consultants; prepare standard operating procedures; prepare consultant and contractor procurement documents; review, evaluate and rate consultant proposals; review and comment on scope of work and contract terms; evaluate project schedules; prepare contract documents for bidding, including cost estimates and project schedules; advertise for and evaluate construction bids.
- Monitor work in progress, including monitoring and conducting regular and emergency field investigations and inspections, to comply with approved plans, specifications and standards; analyze data and results of instrument readings; prepare inspection reports.
- Compile and maintain project files, records, documents and databases; maintain work order logs and verify documents are updated to reflect changes; develop and design databases for projects.
- Prepare and deliver presentations of technical data and results to technical review committees, District staff and other governmental agencies.
- Keep up-to-date on current technology in field of specialization through reading professional literature, attending conferences and training.
- Provide assistance and support related to emergency operations.
- Perform other related duties as assigned.

Knowledge, Skills and Abilities Required:

- Knowledge of theory, principles and practices of civil, structural, or mechanical engineering design and project management.
- Knowledge of theory and practice of land surveying.
- Knowledge of engineering hydraulics, hydraulic calculations, hydraulic modeling and application of results to water system planning and design.
- Knowledge of basic computer operations and Microsoft Office including AutoCAD.
- Knowledge of safety practices and procedures applicable to the job.
- Knowledge of personnel, administrative, safety and departmental policies.
- Skill in customer relations and communications, including the ability to effectively and tactfully work with difficult customers and complex customer issues.
- Ability to review, prepare and coordinate preparation of engineering plans and specifications for small to mid-sized capital improvements projects.
- Ability to prepare and evaluate engineering studies of water system infrastructure related projects.
- Ability to plan and manage engineering projects from planning and design thru construction.
- Ability to clearly communicate scientific and technical matters to coworkers and technical staff.
- Ability to learn the District's customized utility billing program and any supporting programs.
- Ability to learn to effectively use the Meter and Service Installation System and process.
- Ability to establish and maintain respectful and harmonious relationships with others both inside and outside the organization.
- Ability to perform effectively in an independent or team environment, as well as display self-motivation skills.
- Ability to communicate effectively both orally and in writing with coworkers, customers and other agencies.
- Ability to recognize and keep sensitive information confidential.
- Ability to manage records and information in any format, in accordance with applicable statutes, regulations and District policy, guidance and records retention schedule.
- Ability to display TVWD's vision of delivering the best water, service and value by demonstrating reliability, integrity, stewardship, excellence and safety.

Minimum Requirements:

- Bachelor's degree in civil or mechanical engineering or related engineering specialty; and
- Minimum of two years of entry-level engineering or equivalent experience; and
- Certification as Engineer in Training (EIT); or
- Any combination of experience and training which provides the equivalent scope of knowledge, skills and abilities required to perform the work.

Special Qualifications:

- Possess a driver's license valid in the State of Oregon; have and maintain a safe driving record.

Working Conditions:

- Have regular and predictable attendance.
- Prolonged periods of sitting or standing.
- Daily verbal communications both in person and on the telephone.
- Operate, read information and focus on a personal computer, telephone and other related equipment.
- Respond to work, without advanced notice, in times of adverse weather, natural disaster, emergency, or other unusual event as determined by the District.
- Occasional work outdoors in unfavorable conditions, on rough terrain and the ability to perform physical tasks that are moderately demanding.
- Attend meetings at various locations in and out of the Portland Metro Area, often times are outside of normal working hours.
- This is a non-exempt position.