

## **VALLEY CENTER MUNICIPAL WATER DISTRICT**

### **ENGINEERING TECHNICIAN II**

#### **DEFINITION**

Incumbents perform a variety of technical engineering duties in support of District activities in the office and/or in the field with increasing levels of understanding, application, correlation and responsibility with each position level.

#### **CLASS CHARACTERISTICS**

Engineering Technician II (Tech II) is the journey level position in the Engineering Technician series. Under general supervision of the District Engineer and immediate supervision by the Senior Engineering Technician, , incumbents are expected to perform the Tech 1 duties with a higher level of understanding and application with less direct supervision. Incumbents are expected to begin to specialize in specific areas while maintaining Tech I level proficiency in all areas.

Incumbents are expected to perform a wide range of increasing complex duties depending on experience levels related to engineering support activities to include, but not limited to, the following: customer service, engineering records processing and maintenance, computer drafting, geographic information system utilization, surveying, easement preparation and review, facility construction inspection, utility mark-outs, plan review, material submittal review, water and wastewater design, and project coordination assistance

#### **ESSENTIAL DUTIES**

*The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related, or a logical assignment to this position.*

Plots and drafts plan and profile sheets from field survey books and survey data; prepares drawings of existing improvements, rights-of-way, and other utilities; drafts/plots easements from legal description.

Provides technical engineering support to the Project Managers.

Designs non-complex water and sewer improvements.

Exhibits proficiency in current versions of AutoCAD and Civil 3D, knowledgeable in the following drafting fundamentals:

- Setting up templates, profiles, viewport scales, and data tables
- Utilizing proper labeling, callout, and annotation conventions
- External references, plotting, importing/exporting to other formats
- Plot easements based on legal descriptions and generate plats
- Operate plotter and managing its supplies and leasing contract

Knowledge GIS software and ability to translate and input CAD data into District GIS system under direction of GIS Analyst.

Responsible for maintaining engineering documents.

Processes development plans and assists with reviews from completeness and compliance with District

design/construction standards.

Checks water line plans for line size, hydrant type and size, available water pressure, and location of valves and fittings and right-of-way required.

Checks sewer plans for type of bedding, size, type and location of manholes, backflow or overflow devices and right-of-way required; checks recycled water line plans for line size, available pressure, location of valves and fittings and any right-of-way required.

Checks slopes and elevations for conformance with District requirements.

Performs calculations of water and recycled water demands and sewage generation, hydraulics and other engineering computations.

Prepares or checks easement drawings and legal descriptions; prepare quantity and cost estimates; may perform survey work and/or field verifications of existing facilities.

Compiles, analyzes and interprets red line drawings received from the District's construction inspectors; transfers inspector's updates to original mylar drawings.

Reviews and evaluates, studies, designs, reports and records generated by other departments and outside entities.

Coordinates with residents, customers, and property owners on project related matters; facilitates meeting with contractors, developers, and stake holders as required; coordinates with other departments.

Processes requests from property owners and utility companies for easements over District fee property; researches requests and reviews descriptions and plan or documents submitted.

Facilitates document recordation with county clerk and assessor; reviews engineering department documents prior to recording.

Performs related work as required, exercising more autonomy and responsibility over time.

Performs other duties as assigned.

## **QUALIFICATIONS GUIDELINES**

**Knowledge of:** Customer services practices, principles, methods and materials of civil engineering support work, including mapping, drafting, design and specifications, estimation and construction as related to District facilities; engineering mathematics, including trigonometry; data collection and analysis methods; basic GIS principles; standard office practices and procedures; surveying principles, practices and equipment; operation of standard office and engineering equipment including computers, MS Office and GIS software applications, calculators, reproduction equipment, drafting tools, survey equipment and related software applications common materials used in construction of water and sewer utilities, such as pipe, fittings, valves, and other related appurtenances; industry standard construction methods, safety, environmental, storm water pollution prevention plan and other state/federal regulations.

**Ability to:** Perform technical engineering support work in a variety of areas; use office and drafting tools, software and equipment in preparing skilled layouts, prepare maps and related materials; prepare basic water design drawings; analyze engineering technical and statistical information, evaluate alternatives and making sound recommendations; prepare accurate records and notes, clear and concise reports, correspondence and other written materials; read and interpret contracts, plans, specifications, maps, legal descriptions and related complex regulatory and technical information; utilize GIS extensions: communicate clearly and concisely, and be understood while using the District's radio communication system; establish and maintain effective working relationships with other employees and those contacted in the course of the work.

## **EDUCATION, EXPERIENCE, LICENSES AND CERTIFICATIONS**

**Education:** Equivalent to a High School Diploma; completion of college level coursework in drafting, civil engineering, CADD, water technology or related fields; or an Associate's Degree with course work in engineering or a related field is highly preferred.

**Experience:** Two years of experience as an Engineering Tech I, or its equivalent; or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

**License and Certifications:** California Class C Driver's License

## **PHYSICAL DEMANDS AND WORK ENVIRONMENT**

*The physical demands and work environment described here are representative of those that must be met by an incumbent to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

**Physical Demands:** While performing the duties of this position, and depending on assignment, incumbents may regularly be required to use hands to grasp or feel, reach with hands and arms, stand, sit, walk, climb, balance, stoop, kneel, crouch, crawl, talk and hear. Incumbents may occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

**Work Environment:** While performing the duties of this position, work is performed either in an office settings or outdoors. Incumbents working outdoors may occasionally work near moving mechanical parts and be occasionally exposed to fumes or airborne particles. The noise level in the work environment is usually quiet to moderate.

POSITION DESCRIPTION APPROVED:

  
\_\_\_\_\_  
**General Manager**

06/30/2020

\_\_\_\_\_  
**Date**