



Tuolumne Utilities District  
Job Description  
**ENGINEERING TECHNICIAN 1/2**

POSITION:	Engineering Technician 1/2	DEPARTMENT:	Engineering
REPORTS TO:	District Engineer	FLSA Status:	Non-Exempt
PAY RANGE:	34/38	DATE PREPARED:	July 2020
INCUMBENT:			

**Summary:**

Under supervision, performs technical field and office duties supporting the Engineering Department activities related to the planning, design, bidding, construction, installation, maintenance, and inspection including other activities such as surveying, drafting, mapping, researching real property interests and related activities.

**Class Characteristics:**

Engineering Technician 1 is the entry level class in this series. Under general supervision, incumbents perform all tasks related to a variety of technical engineering support functions. As experience is gained, technicians may independently perform more complex tasks. This class may be alternately staffed with Engineering Technician 2, and incumbents may advance after gaining experience, meeting the qualifications of and consistently performing work of the higher-level class.

Engineering Technician 2 is the journey level class in this series. Under minimal supervision, incumbents are fully competent to independently perform all tasks related to a variety of technical engineering support functions. Incumbents in this classification may assist with the training and oversight of less experienced staff.

**Essential Functions** –*Essential responsibilities and duties may include, but are not limited to, the following:*

- Provide engineering support to staff, customers, consultants, surveyors, environmental professionals, contractors, regulators, etc.
- Perform a variety of technical field and office engineering such as design, mapping, drafting, bidding, cost estimating, surveying right-of-way and property acquisition, inspection, project management, permitting, engineering and project plan development, data entry and analysis.
- Develop or update existing maps and drawings requiring interpretation and use of topographic maps, assessor parcel maps, recorded maps or deeds, CalTrans drawings, standard construction details, plan and profile sheets and other existing drawings or digital information.
- Interpret rough sketches and data collected by field personnel or engineering staff.
- Develop graphs and charts.
- Maintain current and archive maps, flat files and drawing files.

- Maintain organized computer files and standardized CAD system.
- Develop and maintain report, catalog and archive filing systems.
- Provide a variety of engineering technical support to other departments within the District.
- Perform other related duties as assigned.

**Qualification Requirements:**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Knowledge of:**

- Use of word processing, spreadsheet programs, and AutoCAD Civil 3D.
- Nomenclature, symbols, methods, practices, techniques, and instruments used in a variety of engineering drafting and mapping work.
- Safe work methods and safety precautions as related to the job.
- Basic mathematical principles including algebra, geometry, and trigonometry.
- Word processing and spreadsheet applications.

**Ability to:**

- Use CAD drafting instruments and other drafting aids with skill and accuracy.
- Make accurate mathematical and scaling computations.
- Prepare and maintain maps, drawing, exhibits and charts.
- Operate copying and plotting equipment.
- Work independently with minimal supervision.
- Read and interpret engineering plans and specifications.
- Compose technical reports and written correspondence.
- Perform basic engineering related calculations with speed and accuracy.
- Perform technical research related to maps, deeds and property rights.
- Maintain records and files.
- Compile and process large amounts of data into graphs and reports.
- Understand and carry out written and oral instructions.
- Represent the District in a professional manner at public meetings and meetings with contractors.
- Work cooperatively and communicate effectively and professionally both verbally and in writing
- Complete tasks as assigned and develop the end product in a professional manner suitable for use in formal presentations.

**Physical Demands:**

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

While performing the duties of this job, the employee is regularly required to display verbal skills to effectively interface with other staff members; maintain the capacity to sit at a computer for extended periods of time; walk, climb and negotiate uneven terrain; file and retrieve large maps from map file, requiring stooping, bending and reaching; ability to lift, push, pull and carry up to 30 lbs.; use hands to finger, handle, or feel objects and controls; and drive a vehicle in all weather conditions.

Specific vision abilities required by this job include close vision, distance vision, peripheral vision, and the ability to adjust focus.

**Work Environment:**

The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Outside: Occasionally drives a vehicle and performs assigned duties in a variety of weather conditions ranging from snow to 100+F.

Inside: The majority of the job activities are performed indoors in a temperature-controlled environment.

Fumes/Gasses: Occasional exposure to various vapors from internal combustion engines.

Noise/Vibration: Minimal exposure to noise generated from the operation of office equipment.

**Other Requirements:**

**For Engineering Technician 1**

**Education/Certification/Experience:**

- High school diploma or general education degree (GED) equivalent, including drafting courses or demonstrated ability or aptitude to learn AutoCAD. Equivalent to completion of an Associate degree, with course work in mathematics, AutoCAD, GIS, engineering or related field is preferred.
- Must possess a valid California driver's license and have a satisfactory driving record.
- Two years' experience performing similar technical engineering or construction related duties.

**For Engineering Technician 2**

In addition to the qualifications above, the Engineering Technician 2:

- Two years' responsible experience similar to Engineering Technician 1 with the Tuolumne Utilities District.

Work Hours:

7:00 a.m. to 4:00 p.m., Monday through Friday. Subject to change, as required to meet the needs of the District. Must be willing to work overtime and/or alternate schedule when required. May be called in during non-business hours to assist with emergencies.

I have reviewed this job description and agree to obtain or maintain any job specific requirements.

\_\_\_\_\_  
Supervisor's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Employee's signature

\_\_\_\_\_  
Date

Approved by General Manager: Approval Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_