

CITY OF SANTA CLARA, CALIFORNIA
CLASS SPECIFICATION

TITLE: ENGINEERING TECHNICIAN Aide (ELECTRIC) (JOB CODE 460A)

<u>DEPARTMENT</u>	<u>ACCOUNTABLE TO</u>	<u>FLSA STATUS</u>
<u>Electric Utility</u>	<u>Various</u>	<u>Non-Exempt</u>

CLASS SUMMARY

The Engineering ~~Technician Aide~~ (Electric) is ~~the~~ an entry-level ~~classification~~ classification in the paraprofessional Engineering ~~Aide Technician~~ series. ~~An incumbent in this classification performs routine technical office and field work in support of various engineering projects in the Electric Utility Department. Specific responsibilities will vary according to assignment. The Engineering Aide (Electric) is distinguished from the Senior Engineering Aide by its focus on routine paraprofessional engineering duties and the performance of duties under more immediate supervision.~~ Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The Engineering Technician Aide (Electric) is distinguished from the Senior Engineering Technician Aide by its focus on routine paraprofessional engineering duties and the performance of duties under more immediate supervision. Incumbents' work is closely supervised, work methods are explained in specific terms and work is subject to frequent review.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE

- ~~Graduation from an accredited junior college with an Associate of Arts degree or higher in engineering or its equivalent, including satisfactory completion of college level courses in writing, mathematics, engineering and related courses~~ Graduation from high school or tested equivalent, and
- One (1) year working with geographic information system (GIS) tools and systems OR one (1) year working with computer-aided drafting (AUTOCAD).

DESIRABLE QUALIFICATIONS ~~Desirable Qualifications:~~

- ~~GIS AND CAD experience One year (1) experience working with C~~ computer-aided drafting (AUTOCAD) and one year (1) experience working with geographic information system (GIS)
- Completion of post-secondary ~~course~~ works in GIS and AUTOCAD.

ACCEPTABLE SUBSTITUTION

Possible Substitutions:

Post-secondary education equivalent to thirty (30) semester units or forty-five (45) quarter units including satisfactory completion of courses in mathematics, engineering, CAD, GIS, or related subjects may be substituted for the experience requirement

~~Three (3) years of work experience performing mapping/drafting activities of electric utility facilities, involving the use of CAD and GIS systems and tools may substitute for the required education and experience.~~

ENGINEERING ~~TECHNICIAN~~ (ELECTRIC) (460A)

LICENSES/CERTIFICATIONS

LICENSE

Possession of a valid California Class C driver's license is required at the time of appointment and for the duration of employment.

OTHER REQUIREMENTS

- Employees are required to pass initial and periodic comprehensive background checks, which may include fingerprinting, to meet Federal, State and/or industry security requirements.
- Must be able to perform all the essential functions of the job assignment, with or without reasonable accommodations.

TYPICAL DUTIES

This description may not include all the duties listed below, nor do the examples cover all duties that may be performed.

~~Duties may include, but are not limited to, the following:~~

Under ~~general direction~~immediate supervision, the incumbent will:~~Under general supervision:~~

- Participates in field survey activities such as assisting with measuring and recording distances and elevation using Global Positioning System (GPS) equipment
- Prepares maps and drawings using geographic information system (GIS) tools to place symbols and apply color codes for the identification of facilities
- Receives, reviews, provides comments, files, and returns maps, documents, and plans using ~~AUTO~~CAD
- Performs scaling and dimensioning to verify the accuracy of maps and plans
- Assists in conducting field inventory of existing primary and secondary conductors, transformers, switches, poles, pole attachments, manholes, and conduit locations
- Draws and updates electrical schematic diagrams, panel wiring diagrams, substation layout drawings using ~~AUTO~~CAD, and organizes associated documentation
- Prepares scaled and dimensioned plans, using ~~AUTO~~CAD based on sketches prepared by engineering/estimating personnel
- Operates a computer and standard office plotting/copying equipment
- Conducts records research including job files, property ownership, easement and right-of-way records
- Maintains records of equipment databases, log books, and map inventories
- Operates passenger vehicles requiring Class C driver's license
- Orders office drafting supplies, manages outside reproduction services, and coordinates vendor services for office drafting equipment maintenance
- Performs other related duties as assigned

KNOWLEDGE, SKILLS, & ABILITIES

ENGINEERING ~~TECHNICIANAIDE~~ (ELECTRIC) (460A)

Knowledge of:

- General principles of algebra, geometry, trigonometry, and mechanical drawing
- Principles and practices of engineering drafting and basic graphic design
- Standard personal computer hardware and software, including word processing, spreadsheet, and database programs
- Document control, retrieval, and filing systems

Ability to:

- Prepare neat and accurate drawings, diagrams, dimensions, representations, and schematics using GIS and CAD tools [and applications](#)
- Select and use appropriate drafting, and duplicating equipment and materials
- Read, interpret and apply engineering terminology and symbols
- Retrieve, file, and code drawings and diagrams and prepare brief reports
- Maintain organized and complete records
- ~~Utilize ESRI Geographic Information Systems (GIS)~~
- ~~Utilize AutoDesk AutoCAD software applications~~
- Communicate effectively, both orally and in writing
- Understand and comprehend oral and written directions and instructions
- Effectively handle multiple priorities, organize workload, and meet strict deadlines
- Establish and maintain effective working relationships with those contacted in the course of work, including the ~~general~~ public
- Work in a ~~team-based~~ [team-based](#) environment and achieve common goals
- Deal tactfully and courteously with others
- Walk, sit, or stand for extended periods of time
- Perform moderate physical labor including bending, stooping, crawling, climbing, and lifting as necessary to perform assigned duties

SUPERVISION RECEIVED

~~Works under the immediate supervision of~~ [Receives immediate supervision from](#) a Senior Engineering [TechnicianAide](#), ~~E~~-engineer, or other supervisor as assigned.

SUPERVISION EXERCISED

May assist in the training of personnel as assigned.

CLASSIFICATION HISTORY

[Established 10/1997; Rev 10/2018; Rev. 9/2024](#)