# MENDOCINO COUNTY GOVERNMENT CLASS SPECIFICATION

CLASS TITLE: ENGINEERING TECHNICIAN I CLASS CODE: 2022

ENGINEERING TECHNICIAN II CLASS CODE: 2023

DEPARTMENT: TRANSPORTATION FLSA STATUS: N
REPORTS TO: DEPUTY DIRECTOR DATE: 01/00 rev. 01/12
CIVIL SERVICE: YES BARGAINING UNIT: SEIU

#### JOB SUMMARY:

Under general supervision, performs moderately complex technical and para-professional engineering duties; coordinates the allocation of resources to projects; performs a variety of technical work involving the design, construction, maintenance and management of projects.

#### **DISTINGUISHING CHARACTERISTICS:**

Working under direct supervision, Engineering Technician I, is the entry level in the Engineering Technician series. Employees in this class receive training, are given detailed instructions in the performance of routine tasks and perform tasks that are more structured and repetitive than those assigned at the II level. As requisite skills and knowledge are developed, greater independence and the full scope of responsibility are exercised. Most incumbents are expected to promote to the journey level within one to two years of successful performance; however, positions that are limited to duties of a more routine repetitive nature may be permanently allocated at the I level.

Working under general supervision, Engineering Technician II is the journey level in the Engineering Technician Series. Employees at this level are expected to have related background and experience and to be qualified to perform the full scope of duties, using independent judgment in selecting and applying specific references, procedures, sequenced and alternatives to different work situations. Positions in this class are flexibly staff from the lower level of Engineering Technician I, or if filled from the outside, require prior related experience.

SUPERVISION EXERCISED: No supervision is exercised. Engineering Technician II may train other staff.

# **EXAMPLES OF DUTIES**: Duties may include but are not limited to the following:

- Oversee and/or prepare construction plans for small scale public works projects.
- Compute land, earth work, and other quantities for assigned construction projects.
- Perform moderately complex resident engineering and/or technical and para-professional design and survey work in a training capacity.
- Review, analyze and prepare progress reports and activity reports.
- Analyze and evaluate technical reports, statistics and data relating to maintenance and/or management programs.
- Perform field and office work related to property or right-of-way boundaries such as preparing property descriptions and maps and researching records.
- Perform routine checks of survey, parcel, and final maps for compliance with applicable laws, ordinances, and established survey practices.
- Participate in computer preparation of work programs and budgets for design, construction and maintenance activities.
- Review engineering designs and plans as needed.
- Perform resident engineering work including research, cost estimating, payroll monitoring, construction supervision and other duties on small scale projects.
- Inspect and evaluate various phases of construction in progress, ensuring compliance with plans and specifications.
- Coordinate the scheduling, reporting and analysis of maintenance and/or management activities through computer calculations.
- Maintain appropriate records and reports pertaining to personnel workload and scheduling of activities.
- Coordinate and oversee the collection of field data and preparation of maps, cross-sections, and other survey data.
- Prepare contract specifications and construction guidelines.
- Monitor and maintain correspondence with private contractors and sub-contractors on County projects.
- Perform other related duties as assigned.

#### **MATERIAL AND EQUIPMENT USED:**

Surveying Equipment Computer Scientific Calculator Vehicle

General Office Equipment Camera Transits/Levels Theodolite (Data Collector)
Soils Testing Equipment Auto Desk Software Computer aided design (CAD)

Engineering Technician I & II Class Specification Class Code: 2022 / 2023 Page 2

#### MINIMUM QUALIFICATIONS REQUIRED:

## **Education and Experience:**

#### **Engineering Technician I**

Associate's degree or equivalent from an accredited two-year college or technical school; and, no prior experience; or, an equivalent combination of related education, training and experience which provides the required knowledge, skills, and abilities to perform the essential functions of the job.

#### **Engineering Technician II**

Associate's degree or equivalent from an accredited two-year college or technical school; and, one year of full-time experience as an Engineering Technician I with Mendocino County, or one to two years of progressively responsible related experience equivalent to Engineering Technician I; or, an equivalent combination of related education, training and experience which provides the required knowledge, skills, and abilities to perform the essential functions of the job.

#### **Licenses and Certifications:**

Valid State Driver's License

#### **KNOWLEDGE, SKILLS, AND ABILITIES:**

#### Knowledge of:

- Principles and practices of mathematics through trigonometry.
- Basic surveying terms and practices.
- All computer applications and hardware related to performance of the essential functions of the job.
- Basic principles and practices of civil engineering.
- Basic construction terms and practices.
- Basic principles of drafting and plan layout.
- Computer Aided Design (CAD) software including Auto Desk software for performing drafting.

#### Skill in:

- Using tact, discretion, initiative and independent judgment within established guidelines.
- Organizing work, setting priorities, meeting critical deadlines, and following up on assignments with a minimum of direction.
- Communicating clearly and effectively, both orally and in writing.

## **Mental and Physical Abilities:**

- Read and interpret documents such as safety rules, operation and maintenance instructions, procedure manuals, and so
  forth.
- Read and interpret blueprints and project plans.
- Solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists.
- While performing the essential functions of this job the employee is frequently required to stand, walk, sit, use hands to
  finger, handle, or feel, reach with hands and arms, lift and/or move up to 25 pounds, and speak and hear.
- While performing the essential functions of this job the employee is occasionally required to lift and/or move more than 100 pounds.

# **Working Conditions:**

- While performing the essential functions of this position the employee is frequently exposed to outdoor weather conditions, fumes or airborne particles, work near moving mechanical parts, and work in high precarious places.
- The incumbent's working conditions are typically moderately loud.

This class specification should not be interpreted as all inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the Americans with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.