

**MENDOCINO COUNTY GOVERNMENT
CLASS SPECIFICATION**

CLASS TITLE:	SENIOR ENGINEERING TECHNICIAN	CLASS CODE: 2024
DEPARTMENT:	DEPARTMENT OF TRANSPORTATION	FLSA STATUS: N
REPORTS TO:	DEPUTY DIRECTOR	DATE: 10/10 rev. 01/12
CIVIL SERVICE:	YES	BARGAINING UNIT: SEIU

JOB SUMMARY

Under general supervision, performs 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. Administers all permit functions within the department including writing of permits, enforcement of provisions and conditions of permits through field inspections of the work and/or quality control of construction-related activities within the County's public right-of-way; inspects all new subdivisions and road work within these subdivisions, performs materials testing, maintains records pertaining to permits, structures, and subdivisions.

DISTINGUISHING CHARACTERISTICS: This is the lead level Engineering Technician position within the Engineering Technician series. It is distinguished from Engineering Technician II by the performance of most complex duties and lead work.

SUPERVISION EXERCISED: No supervision exercised. The Senior Engineering Technician acts as a lead worker over Engineering Technicians and other support staff.

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

- Carry out lead worker responsibilities including: training in job skills, assigning and directing work, making recommendations in performance appraisal, and reporting problems to supervisor.
- Perform moderately complex engineering work, which includes the supervision and inspection of construction engineering projects.
- Inspect and evaluate on-going projects assuring compliance with construction plans and specifications.
- Coordinate and oversee major and minor improvement projects within the County.
- Train other surveyors in the proper use of survey equipment.
- Perform field calculations pertaining to work.
- Maintain appropriate records and reports pertaining to personnel, project and/or general staff workload.
- Interview applicants, inspect plans, and issue permits assuring compliance with established policies.
- Coordinate and oversee the collection and reduction of field data and the preparation of maps, cross sections and other work-related data.
- Perform complex route studies and supervises the development of construction plans.
- Oversee, monitor, and maintain correspondence with private contractors and sub-contractors constructing County projects.
- Prepare property maps and legal descriptions of property and performs other field work related to property right of way boundaries.
- Compute land, earthwork and other estimated quantities for assigned construction projects.
- Calculate, supervise and performs the placement of engineering stakes for the construction of major construction and major public works projects.
- Review complex engineering designs and plans as needed.
- Perform complex hydraulic engineering and/or other professional-level duties within a training capacity.
- Plan, assign, and supervise field and laboratory work pertaining to the sampling and testing of construction materials.
- Compute cost estimates, engineering and inspection fees, and/or storm and sewage acreage fees.
- Prepare resolutions, contracts, change orders and bonds to accompany major construction and subdivision proposals as required.
- 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	Lab Testing Equipment	Auto Desk Software	Computer aided design (CAD)

MINIMUM QUALIFICATIONS REQUIRED:

Education and Experience:

Associate's degree or equivalent from an accredited two-year college or technical school; and, four years of progressively

responsible related 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.

Licenses and Certifications:

Valid State Driver's License

Nuclear Gauge Certified or ability to become certified within one year

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Principles and practices of mathematics through trigonometry.
- Surveying terms, methods, and practices.
- California Test Methods 200 Series and 500 Series, soil testing tools, and equipment.
- The uses, physical characteristics, sampling, and testing of construction materials.
- All computer applications and hardware related to performance of the essential functions of the job.
- Recordkeeping, report preparation, filing methods and records management techniques.
- Basic accounting principles and practices.
- Administration of staff and activities, either directly or through subordinate supervision.
- Principles and practices of civil engineering.
- Underground utility installation procedures.
- Principles, practices, materials and methods of construction.
- 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.
- Researching, compiling, and summarizing a variety of informational and statistical data and materials.
- Using mathematics.
- Communicating clearly and effectively, both orally and in writing.
- Planning, organizing, assigning, directing, reviewing and evaluating the work of staff.
- Selecting and motivating staff and providing for their training and professional development.

Mental and Physical Abilities:

- Read, draw and interpret blueprints and project plans.
- Perform complex tests and analyses on construction materials.
- Establish and maintain effective working relationships with a variety of individuals.
- Read and interpret documents such as safety rules, operation and maintenance instructions, procedure manuals, and so forth.
- 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, climb or balance, stoop, kneel, crouch, or crawl, 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, and toxic or caustic chemicals.
- The incumbent's working conditions are occasionally 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.