

## TAHOE-TRUCKEE SANITATION AGENCY

### Class Specification

#### **Job Title: Senior Engineer**

**Department: Technical Services**

**FLSA Status: EXEMPT**

**Revised as of: 09/2023**

#### **DEFINITION**

Plans, organizes, supervises, and performs professional and highly complex and technical civil engineering duties including the design, drafting, planning, bidding, inspections and implementation of construction projects and technical work for the plant/pipeline operations and maintenance programs; prepares contract documents; conducts special studies; prepares reports; and provides highly responsible professional support to an assigned manager.

#### **DISTINGUISHING CHARACTERISTICS**

This is the most advanced professional level in the Engineer series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, the amount of time spent performing these duties requiring independent judgment and discretion, and the nature of the public contact made. Employees perform the most difficult and responsible types of duties assigned to classes within this series, including providing lead supervision over lower level technical and professional personnel, and perform complex design, planning, and implementation of projects. Employees at this level are required to be fully trained in all procedures related to assigned areas of responsibility.

#### **SUPERVISION RECEIVED AND EXERCISED**

Reports directly to, and receives general direction from, the Technical Services Department Manager. Exercises lead supervision over lower level technical and professional classes. May serve as District Engineer.

**EXAMPLES OF DUTIES:** *the duties specified below are representative of the range of duties assigned to the class and are not intended to be an inclusive list.*

- Plans, prioritizes, assigns, supervises and reviews the work of a variety of lower level technical and professional staff engaged in civil engineering, design, planning, bidding, inspections and implementation of construction projects, technical work for the plant/pipeline operations and maintenance programs and related support functions.
- Evaluates operations and activities of assigned section; recommends improvements and modifications; prepares various reports on operations and activities.
- Performs the most difficult and highly complex professional and technical civil engineering duties requiring specialized knowledge related to the design and completion of complex engineering and construction assignments.

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- Develops schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner; prioritizes and develops critical path schedules to successfully manage overlapping and sequential work activities.
- Assists with the selection of staff; provides or coordinates staff training.
- Serves as project manager for the more complex capital improvement projects including the development of Requests for Qualifications and Requests for Proposals, the development and monitoring of project budgets, management of outside design consulting firms and management of the construction phase; performs inspections of on-site and off-site projects.
- Prepares complex engineering studies and reports; coordinates projects with other Agency departments, outside agencies, consultants, and developers; participates in the development of Agency master plans.
- Prepares contract documents for construction projects including development of complex, detailed drawings and specifications tailored to the specific needs of various projects.
- Identifies deficiencies of, and makes improvements and additions to, existing Agency drawing and specification libraries for use on future projects.
- Oversees development of record drawings for ongoing construction projects. Assists in the development of record drawings for past projects.
- Researches project design requirements and performs related calculations; conducts plan checks to ensure compliance with Agency and regulatory standards; prepares time and material cost estimates.
- Researches and recommends use of consultants and contractors for various projects, programs, and other work activities; monitors progress and authorizes payments according to contract terms and conditions.
- Prepares, reviews, interprets and revises technical and administrative reports, prepares and reviews instructions, memos, letters, other correspondence and other documentation; performs research and conducts complex studies.
- Analyzes, understands, interprets, and communicates to others the correct application of applicable Federal, State, and Local governmental regulations, technical reports, manuals, sketches and related information.
- Adheres to and ensures compliance with safety and emergency policies, procedures, rules, regulations and standard operating procedures.
- Oversees and participates in bidding process, oversees and ensures compliance with contracts and agreements; monitors contractor performance.
- Reviews and checks plans and specifications for conformance with design standards, codes and regulations.
- Oversees, reviews and performs technical work for the plant/pipeline operations and maintenance programs.
- Uses and maintains Agency electronic data/documents management systems and Agency electronic tracking/storage systems in support of engineering projects and related work.
- Prepares for and participates in effective public speaking presentations to a variety of audiences.
- May serve as acting Technical Services Department Manager in Manager's temporary absence.
- Coordinates construction activities with other departments, divisions, and outside agencies.

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- Represents the Agency with dignity, integrity, and the spirit of cooperation in all relations with staff and the public.
- Builds and maintains positive working relationships with co-workers, other Agency employees and the public using principles of good customer service.
- May be required to work unusual hours and shifts.
- Performs related duties as assigned.

### **QUALIFICATIONS**

#### **Knowledge of:**

- Principles and practices of professional civil engineering, construction, inspection, and design project requirements.
- Advanced project management methods.
- Methods and procedures related to wastewater treatment, conveyance systems, plant and pipeline operations, analytical quality control methods and interpretation of data.
- Master planning, application of asset management principles, development of capital improvement plans.
- Current development and trends related to professional engineering.
- Methods and procedures for securing permits and approvals; Federal, State, and local regulations, laws, codes, ordinances and rules related to construction and civil engineering projects.
- Principles and practices of supervision and training.
- Modern office practices, methods and equipment including personal computers, AutoCAD and other specialized civil engineering software applications, fax machines, copiers, printers, telephones, voicemail and e-mail systems, electronic data/documents management systems, electronic tracking/storage systems, etc.
- Principles and practices of budget planning, processes, monitoring and implementation.
- Oral and written communication skills; business English including vocabulary, spelling, and correct grammatical usage and punctuation.
- Safe work practices, policies, rules, regulations methods and procedures as relates to design, engineering, construction and emergency procedures and equipment.
- Principles and practices of customer service.

#### **Ability to:**

- Organize, implement, supervise and participate in civil engineering, design, drafting, writing, planning, bidding, inspections and implementation of construction projects and technical work for the plant/pipeline operations and maintenance programs.

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- On an ongoing basis, know and understand all requirements and essential aspects of the job including laws, regulations, rules and codes related to area of assignment; intermittently access, review, and adjust and enter data on documents, reports and files; design engineering plans and specifications; conduct surveys of proposed construction sites; analyze, interpret and recommend changes to engineering work plans; manage engineering and construction projects; interpret analytical results and technical and numerical information; train and explain processes to others; observe equipment and conditions and problem solve issues related to area of assignment; remember various processes and requirements; interpret and communicate information.
- Perform the most complex duties related to professional and highly technical civil engineering assignments.
- Conduct complex special studies; write, review and revise detailed documents and reports.
- Analyze, understand, interpret, and communicate the correct application of relevant governmental regulations, technical reports, books, manuals, sketches and plans.
- Understand and carry out oral and written instructions; prioritize assignments and meet deadlines; adjust to changing requirements and environments.
- Ensure compliance with relevant safety policies, procedures, rules, regulations and standard operating procedures.
- Comprehend the English language at a level necessary for effective job performance exercising correct English usage, vocabulary, spelling, grammar and punctuation.
- Communicate effectively, tactfully and positively in both oral and written form.
- Operate and use modern office equipment and technology, including computers and applicable software including AutoCAD and other specialized engineering software applications.
- Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.
- Function in confined spaces and/or hazardous environment.
- Adhere to and utilize appropriate Agency safety policies, procedures and practices and utilize appropriate Personal Protection Equipment.
- Supervise and train staff.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Contribute effectively to the accomplishment of Agency goals, objectives and activities.

### **Experience and Education:**

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

### **Experience:**

Five years of increasingly responsible professional engineering experience within a utility, including two years providing technical and functional supervision over assigned personnel.

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### **Education:**

Equivalent to a Bachelor's degree from an accredited ABET college or university with major course work in civil engineering or a related field.

### **SPECIAL QUALIFICATIONS**

#### **License and Certificate:**

Possession of a valid California or Nevada Class C Driver License is required at the time of appointment.

Possession of a valid Certificate of Registration as a Licensed Professional Engineer in Civil Engineering issued by the California Department of Consumer Affairs Board for Professional Engineers, Land Surveyors, and Geologists.

Possession, or ability to obtain confined space certification within six months of appointment.

Persons employed in this classification are required to participate in Agency provided training to acquire basic First Aid and Cardiopulmonary Resuscitation (CPR) certificates during the initial 12 months of employment and continued maintenance of a valid certificate as a condition of employment for this position.

Possession of, or ability to obtain a 40-hour Hazwoper Hazardous Materials Technician Level III certification within six months of appointment.

### **PHYSICAL REQUIREMENTS**

Work effectively for long periods of time at a desk, table, counter; travel to conduct off-site inspections; intermittently move, traverse and position self while performing work activities; ascend and descend stairs, ladders or step stools to inspect or reach equipment or other items and to access areas out of normal reach; manipulate, operate, activate and adjust equipment and tools; position self to adjust office and field equipment or to access low or high items; discern hazardous warning signs and discern and respond to announcements and alarms; maintain airtight seal with self-contained breathing apparatus and air purifying respirator; and move or transport weight of 50 pounds or less.

Ability to wear a self-contained breathing apparatus (SCBA) and Full-Face Air Purifying Respirator (APR).

### **WORKING/ENVIRONMENTAL CONDITIONS**

Work is performed in a typical temperature controlled office environment subject to typical office noise and environment. Incumbents exposed to all weather conditions and plant noise while conducting inspections and field work. Possible exposure to chemicals (dust, gases, liquids, solids, fumes), odors and noise. Position may require work outside of regular business hours, as well as occasional weekend work.