

TAHOE-TRUCKEE SANITATION AGENCY

Class Specification

Job Title: Assistant Engineer/Associate Engineer

Department: Technical Services

FLSA Status: NON EXEMPT

Revised as of: 09/2023

DEFINITION

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

DISTINGUISHING CHARACTERISTICS

Assistant Engineer - This is the entry level class in the Engineer series. Positions in this class typically require little directly related work experience. The Assistant Engineer class is distinguished from the Associate level by the performance of less than the full range of duties assigned to the Associate level. Incumbents work under general supervision while learning job tasks, progressing to relatively less direction as procedures and processes of assigned area of responsibility are learned.

Associate Engineer - This is the journey level class in the Engineer series and is distinguished from the Assistant level by the assignment of the full range of duties. Employees at this level receive minimal instruction or assistance and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the Assistant level once the incumbent meets the qualification standards of the Associate level, demonstrates an ability to perform the full scope of the work, and otherwise meets performance standards.

This class is distinguished from the Senior Engineer in that the latter performs the most difficult and responsible types of duties assigned to classes within this series, including providing lead supervision over personnel and performing complex design, planning, and implementation of projects.

JOB TITLE: Assistant Engineer/Associate Engineer

SUPERVISION RECEIVED AND EXERCISED

Assistant Engineer

Reports directly to, and receives general supervision from the Technical Services Department Manager.

Associate Engineer

Reports directly to, and receives direction from the Technical Services Department Manager.

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

- Performs professional and technical civil engineering duties requiring specialized knowledge related to the design and completion of complex engineering and construction assignments.
- Serves as project manager for a variety of capital improvement projects including the conception, feasibility evaluation, design, scheduling, development of Requests for Qualifications and Requests for Proposals, the development and monitoring of project budgets, oversight of outside design consulting firms and management of the construction phase.
- Performs inspections of on-site and off-site 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.
- Analyzes, understands, interprets, and communicates to others the correct application of relevant Federal, State, and Local governmental regulations, as well as technical reports, manuals, sketches and related information.
- Develops engineering solutions, designs, plans, specifications and cost estimates for projects and equipment.
- Researches products and vendors; solicits quotes, compares costs and evaluates quality of products.
- Adheres to safety and emergency policies, procedures, rules, regulations and standard operating procedures.
- Participates in the bidding process as assigned, monitors performance and compliance with contracts and agreements.
- Reviews and checks plans and specifications for conformance with design standards, codes and regulations.
- Performs confined space entries to inspect tanks and other spaces.
- Prepares and reviews project status reports, memos, letters, and other correspondence.
- Performs research and conducts technical studies and investigations; prepares reports and presents finding to appropriate staff.
- Performs technical work for the plant/pipeline operations and maintenance programs, as assigned.

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- Prepares for and participates in effective public speaking presentations to a variety of audiences.
- 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.
- Performs related duties as assigned.

QUALIFICATIONS

Assistant Engineer

Knowledge of:

- Basic principles and practices of engineering, construction, inspection and design project requirements.
- Basic methods, materials, and techniques used in the design, construction, and maintenance and operation of utilities projects and activities.
- Mathematics used in the engineering field.
- Current developments and trends related to professional engineering.
- 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, etc.
- 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:

- Learn to perform professional and highly technical civil engineering duties including design, drafting, planning, bidding, inspections and implementation of construction projects; learn to prepare special engineering reports and studies; and learn to perform technical work for the plant/pipeline operations and maintenance programs.
- Learn to 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; learn to conduct surveys of proposed construction sites; learn to analyze, interpret and recommend changes to engineering work plans; manage engineering and construction projects; learn to interpret analytical results and technical and numerical information; learn to observe equipment and conditions and problem solve issues related to area of assignment; remember various processes and requirements; interpret and communicate information.
- Learn the methods and procedures related to wastewater treatment, conveyance systems, plant and pipeline operations, analytical quality control methods and interpretation of data.

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- Learn the 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.
- Understand and carry out oral and written instructions, prioritize workload to meet deadlines; adjust to changing requirements and environments.
- Learn to conduct complex special studies; write, review and revise detailed documents and reports.
- Learn to analyze, understand, interpret, and communicate the correct application of governmental regulations, technical reports, books, manuals, sketches and plans.
- Ensure adherence to relevant safety policies, procedures, rules, regulations and standard operating procedures.
- Adhere to and utilize appropriate Agency safety policies, procedures and practices and utilize appropriate Personal Protection Equipment.
- Read, write and 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.
- Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.
- Function in confined spaces and/or hazardous environment.
- Utilize appropriate safety procedures and practices for assigned duties.
- 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:

None.

Education:

Equivalent to a Bachelor's degree from an ABET accredited 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.

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Possession of a valid Certificate of Registration as an Engineer-In-Training issued by the California Department of Consumer Affairs Board for Professional Engineers, Land Surveyors, and Geologists.

Possession of, or ability to obtain a 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.

Associate Engineer

In addition to the qualifications for the Assistant Engineer:

Knowledge of:

- Principles and practices of professional civil engineering, construction, inspection and design project requirements.
- Methods and procedures related to wastewater treatment, conveyance systems, plant and pipeline operations, analytical quality control methods and interpretation of data.
- Methods and procedures for securing permits and approvals; Federal, State, and local regulations, laws, codes, ordinances and rules related to construction and engineering projects.

Ability to:

- Perform professional and highly technical civil engineering duties including design, drafting, planning, bidding, inspections and implementation of construction projects; prepares special engineering reports and studies; and performs technical work for the plant/pipeline operations and maintenance programs.
- 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 civil engineering plans; 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; 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.
- Conduct complex special studies; write, review and revise detailed documents and reports.
- Analyze, understand, interpret, and communicate the correct application of governmental regulations, technical reports, books, manuals, sketches and plans.

JOB TITLE: Assistant Engineer/Associate Engineer

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:

Two years of responsible experience similar to an Assistant Engineer with T-TSA.

Education:

Equivalent to a Bachelor's degree from an ABET accredited 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 (for Assistant and Associate Engineer)

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).

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WORKING/ENVIRONMENTAL CONDITIONS (for Assistant and Associate Engineer)

Work is performed in a typical temperature controlled office environment subject to typical office noise and environment. This position also works outside with exposure 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.