



June 2019
FLSA: Assistant - Non-Exempt
Associate- Exempt

ASSISTANT/ASSOCIATE ENGINEER

DEFINITION

Under general supervision or general direction, performs various professional field and office engineering work related to the management, planning, design, construction, and maintenance of the Town's Capital Improvement Program (CIP), land development, traffic engineering, public works infrastructure, and daily departmental operations; provides project management and administration; confers with developers, contractors, and representatives of other agencies regarding facility and infrastructure development; administers professional services and construction contracts; administers Federal and State grant funds associated with construction projects; provides professional staff assistance to the Director of Public Works/Town Engineer, other departments, and the public in areas of expertise; performs a variety of studies and prepares and presents staff reports; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision or general direction from the Director of Public Works/Town Engineer. Exercises no direct supervision of staff. May provide technical and function direction to lower-level staff.

CLASS CHARACTERISTICS

Assistant Engineer: This the entry-level class in the professional engineering series. Initially under close supervision, incumbents with basic engineering experience perform professional and technical engineering work in Town's Capital Improvement Program (CIP), land development, traffic engineering, public works infrastructure, and daily departmental operations, in addition to providing project management and administration. As experience is gained, assignments become more varied and are performed with greater independence. Positions at this level usually perform most of the duties required of the positions at the Associate level, but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. Since this class is often used as a training class, employees may have only limited or no directly related work experience.

Associate Engineer: This is the full journey-level class in the professional engineering series. Incumbents are expected to perform the full range of professional and technical engineering work for the Town's CIP, land development, traffic engineering, public works infrastructure, and daily departmental operations, in addition to providing project management and administration. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. Positions at this level are distinguished from the Assistant level by the performance of the full range of duties as assigned, working independently, and exercising judgment and initiative.

Positions in the professional engineer class series are flexibly staffed and positions at the Associate level are normally filled by advancement from the Assistant level requiring three (3) additional years of experience and after gaining the knowledge, skill, experience, licenses, and certifications which meet the qualifications for and after demonstrating the ability to perform the work of the higher-level class. When filled from the outside, the employee is required to have four (4) years of prior related experience that allows the

employee to meet the qualification standards for the Associate level and to possess and maintain registration as a licensed Professional Engineer in the State of California.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Plans, designs, and inspects all phases of civil engineering public works construction projects, including defining the scope of the project; securing adequate funding from Federal and State grant programs and other funding sources; coordinating with permitting and public utility agencies; performing historical document research and review; surveying and engineering analysis of alternatives; preparing plans, specifications, and cost estimates; performing research, map, and field studies and surveys; drafting site plans with specialized computer software; applying engineering principles and practices to specific problems; coordinating construction schedules with other projects and agencies; preparing and reviewing cost estimates; and inspecting construction of projects to ensure compliance with construction documents; and performs related planning and design work.
- Reviews construction plans prepared by consulting engineers and private contractors to verify compliance with Town sidewalk, public utility, and improvement requirements; checks plans for conformance with regulations regarding line, grade, size, elevation, and location of structures; reviews engineering calculations of other engineers or engineering technicians; participates in pre-design, construction, and utility coordination meetings and issues construction permits.
- Provides construction administration, public relations, management, and inspection of public works construction projects, including coordinating work with other divisions and Town departments, reviewing and inspecting work to ensure conformance with plans and specifications, tracking and maintaining all project accounting, coordinating schedules, and providing public notices of projects.
- Investigates field problems affecting property owners, contractors, and maintenance operations; responds to citizen inquiries and complaints; provides information to the public at the front counter in person, via telephone, or other means of communication regarding grading, encroachment permits, right-of-way and property line information, utility information, slope stability and improvement plan check, and payment processes.
- Reviews traffic control plans; performs speed and traffic surveys and traffic counts.
- Processes subdivisions and prepares and reviews legal descriptions.
- Assists with traffic engineering studies and roadway design.
- Reviews and prepares traffic signal plans, timing plans, and sign and striping plans.
- Reviews tract and parcel maps, lot line adjustments, and other subdivision documents.
- Reviews hydrology studies and hydraulic calculations.
- Attends meetings, conferences, workshops, and training sessions and reviews publications and audio-visual materials to become and remain current on principles, practices, and new developments in assigned work areas.
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities.
- May provide technical direction and training to other engineering and technical staff.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Civil engineering principles, techniques, policies, and procedures.
- Methods, materials, and techniques used in the construction of public works projects, including stormwater, street, and traffic systems design.

- Basic principles, practices, procedures, and standards related to Town public works, engineering infrastructure development and maintenance, and surveying.
- Basic principles and practices of capital improvement program budgeting, cost estimation, funding, project management, and contract administration.
- General design, layout, and construction practices for public improvements such as streets, storm drains, grading, and landscaping.
- Subdivision engineering, plan review, mapping, and construction practices.
- Bidding requirements for public works projects.
- Project management and contract administration principles and techniques.
- Engineering plan types, review practices, and permit filing and approval procedures.
- Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Modern office practices and technology, including personal computer hardware and software applications related to the work, such as computer-aided drafting (CAD) concepts and applications and Geographic Information Systems (GIS) programs.
- Modern developments, current literature, and sources of information regarding engineering.
- Principles of advanced mathematics and their application to engineering work.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Town staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination.

Ability to:

- Conduct complex civil engineering research projects, analyze complex problems, evaluate alternatives, make sound recommendations, and prepare effective technical staff reports.
- Prepare, understand, and interpret engineering construction plans, specifications, and other contract documents.
- Assist in and develop and administer contracts for professional services and construction in a public agency setting.
- Interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, and regulations, technical written material, and Town engineering policies and procedures.
- Design engineering projects.
- Read and understand technical drawings and specifications.
- Perform mathematical and engineering computations with precision.
- Recognize discrepancies from as-built to contract specifications and recommend reconciliation.
- Make engineering design computations and check, design, and prepare engineering plans and studies.
- Direct the work of contract consultants.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, legal descriptions, and other written materials.
- Establish and maintain a variety of filing, record-keeping, and tracking systems.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Effectively represent the department and the Town in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.

- Effectively use computer systems, software applications, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

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

Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or a related engineering field.

Assistant Engineer: One (1) year of professional engineering design, plan review, and project administration experience, preferably in a public agency setting.

Associate Engineer: Four (4) years of professional engineering design, plan review, and project administration experience, preferably in a public agency setting, or three (3) years of experience equivalent to Assistant Engineer at the Town of Paradise.

Licenses and Certifications:

Possession of, or ability to obtain, a valid California Driver’s License by time of appointment and a satisfactory driving record.

Assistant Engineer: Possession and maintenance of Engineer-In-Training certification.

Associate Engineer: Possession and maintenance of a Registered Professional Civil Engineer license in the State of California.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer, to inspect Town development sites, including traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points, to operate a motor vehicle, and to visit various Town and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas and to conduct inspections may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may work in the field and occasionally be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.