



## ASSISTANT/ASSOCIATE ENGINEER

*Class specifications are intended to present a description of the range of duties performed by the classification. Specifications are not intended to reflect all duties performed. Classifications will perform other related duties as assigned.*

### **Definition:**

Under supervision, this position performs professional and technical engineering including designing, surveying and plan checking. This position prepares plans and specifications and is responsible to perform other engineering tasks and duties.

### **Classification Characteristics:**

Assistant Engineer: This is the entry level in the professional Engineer series. This classification is distinguished from the Associate Engineer by the performance of more routine engineering tasks and duties. This level is typically used as a training class and employees may have only limited professional level experience. Positions in this class are flexibly staffed and may advance to the Associate Engineer level when training and experience is sufficient to perform at the full journey level. This level receives direct supervision.

Associate Engineer: This is the full journey level within the professional Engineer series. This classification is distinguished from the Assistant Engineer by the performance of the full range of engineering tasks and duties. This level receives only occasional instruction as new or unusual situations arise 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 Engineering level, or when filled from the outside, have prior engineering experience. This level receives general supervision.

### **Essential Functions:**

- Perform professional and technical engineering work for public works structures including streets, storm drains and sewers; check plans for conformance with regulations regarding line, grade, size, elevations, and locations of structures; check calculations.
- Utilize computer-aided design (CAD) for the design of assigned projects.
- Develop engineering plans, specifications and other contract documents.
- Maintain plans and contract documents including subdivision maps, site plans, lot line adjustments and easements.
- Participate in the preparation of policies and plans, including rules, regulations, design standards and engineering calculation advice.
- Coordinate assigned activities with outside consultants, engineers, developers, contractors, other City departments and outside agencies, respond to inquiries and provide consultative advice.
- Perform a variety of surveying and inspection functions; prepare progress reports on projects under construction; maintain records of changes and field notes.
- Investigate field problems affecting property owners, contractors and City maintenance operations.

- Answer questions and provide information to the public; investigate complaints and recommend corrective action as necessary; resolve complaints concerning the City's engineering function.

**Assistant Engineer Qualifications:**

Knowledge of:

- Principles and practices of civil engineering.
- Applicable laws and regulatory codes relevant to assigned area of responsibility.
- Methods, materials, and techniques used in the construction of public works projects.
- Current literature, information sources, and research techniques in the field of civil engineering.
- Modern developments, current literature and sources of information regarding engineering.
- Principles of advanced mathematics and their application to engineering work.
- Modern office methods, practices, procedures, and equipment including a computer.

Ability to:

- Perform technical research and solve engineering problems.
- Conduct comprehensive engineering studies and prepare reports with recommendations.
- Prepare plans and drawings neatly and accurately.
- Make engineering design computations
- Check, design and prepare engineering plans and studies.
- Learn to interpret and apply City engineering policies and procedures.
- Learn applicable laws, and regulatory codes applicable to areas of assigned responsibility.
- Prepare, understand and interpret engineering plans, specifications and contract documents.
- Operate a computer terminal and use computer-aided design and mapping programs.
- Respond to difficult and sensitive public inquiries.
- Understand and carry out oral and written directions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work, including City staff, City officials, and the public.
- Maintain physical condition, audio-visual discrimination and perception, and mental capacity appropriate to the working conditions and the performance of assigned duties and responsibilities.

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

Experience:

Engineering experience sufficient to demonstrate the possession of the required knowledge and abilities. One year of engineering experience is desired.

Training:

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

License or Certificate:

Possession of a California Class C Driver's License with an acceptable driving record.

**Associate Engineer Qualifications:**

Knowledge of:

- Journey level principles and practices of civil engineering.
- Applicable laws and regulatory codes relevant to assigned area of responsibility.
- Methods, materials, and techniques used in the construction of public works projects.
- Modern developments, current literature and sources of information regarding engineering.
- Make engineering design computations.
- Check design and prepare engineering plans and studies.
- Interpret and apply City engineering policies and procedures.
- Prepare, understand and interpret engineering construction plans, specifications, and other contract documents.
- Principles of advanced mathematics and their application to engineering work.
- Modern office methods, practices, procedures, and equipment including a computer.

Ability to:

- Perform technical research and solve engineering problems.
- Conduct comprehensive engineering studies and prepare reports with recommendations.
- Prepare plans and drawings neatly and accurately.
- Make engineering design computations.
- Check design and prepare engineering plans and studies.
- Interpret and apply City engineering policies and procedures.
- Prepare, understand and interpret engineering construction plans, specifications, and other contract documents.
- Operate a computer terminal and use computer-aided design and mapping programs.
- Respond to difficult and sensitive public inquiries.
- Analyze and compile technical and statistical information and prepare reports.
- Understand and carry out oral and written directions.
- Communicate clearly and concisely, both orally and in writing.

- Establish and maintain cooperative working relationships with those contacted in the course of work, including City staff, City officials, and the public.
- Maintain physical condition, audio-visual discrimination and perception, and mental capacity appropriate to the working conditions and the performance of assigned duties and responsibilities.

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

Experience:

Two years of increasingly responsible professional civil engineering experience.

Training:

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

License or Certificate:

- Possession of a California Class C Driver's License with an acceptable driving record.
- Possession of an Engineer-in-Training Certificate from the California State Board of Registration for Professional Engineers is desirable.

**Working Conditions:**

Work in an office environment including sustained posture in a seated position for prolonged periods of time; standing, walking, kneeling squatting, and stooping. Subject to frequent interruptions and contact in person and on the telephone. Position requires grasping objects, repetitive hand movement and fine coordination including use of a computer keyboard. Lift, drag and push files, paper and documents weighing up to 40 pounds. Speaking and acute hearing is required when providing phone and in-person service. Near and far vision is required for reading written reports, work related documents and for completing site visits and inspections. Drive motorized vehicles.