

CIVIL ENGINEER I
CIVIL ENGINEER II
CIVIL ENGINEER III

Class specifications are intended to present a descriptive list of the range of duties performed by employees in this class. Specifications are not intended to reflect all duties performed in a job.

DEFINITION

Under direct and general supervision, perform professional civil engineering work in the planning, design, technical investigation, inspection, and construction of projects in several areas of public works and civil engineering.

DISTINGUISHING CHARACTERISTICS

Civil Engineer I/II/III is a flexibly-staffed class series. Advancement from the Civil Engineer I level to the II level is at the discretion of the appointing authority, provided that the following criteria are met: (1) the minimum qualifications and time-in-grade requirements, (2) demonstration of the ability to independently perform the full scope of the assigned duties. Advancement from the Civil Engineer II level to the III level is at the discretion of the appointing authority, provided that the following criteria are met: (1) the minimum qualifications and time-in-grade requirements, (2) demonstration of the ability to independently perform the full scope of the assigned duties, (3) Possession of a California Professional Engineer's registration

Civil Engineer I is the entry level professional engineer classification. Incumbents perform less complex office and field civil engineering work under direct supervision in preparation for advancement to the journey level of Civil Engineer II.

Civil Engineer II is the journey level class in the professional civil engineering series not requiring registration. Positions in this class are flexibly staffed and are normally filled by advancement from the lower class of Civil Engineer I, or if filled from the outside, require prior professional level experience and possession of an Engineer-in-Training Certificate. Incumbents in this class work under general direction and perform moderately difficult professional engineering work in civil engineering. Civil Engineer IIs are normally considered to be of a continuing training status and as assigned responsibilities and breadth of knowledge increase with experience, and registration is received, may reasonably expect to be promoted to the next higher class of Civil Engineer III.

Civil Engineer III is the advanced journey level class in the civil engineering series requiring registration. Positions in the class are flexibly staffed and are normally filled by advancement from the lower class of Civil Engineer II, or, when filled from the outside, require prior advanced professional civil engineering work experience. A Civil Engineer III works under general supervision and is expected to complete complex civil engineering assignments requiring the use of judgement and initiative in developing solutions to problems, interpreting general policies, and determining work assignments. Work in this class is distinguished from that of the Civil Engineer II class by the greater complexity of the assignments received and by the greater independence with which an incumbent is expected to operate.

EXAMPLES OF DUTIES

Duties may include, but are not limited to, the following. *For Civil Engineer I, duties are performed at the entry/training level; for Civil Engineer II, duties are performed at the journey level; for Civil Engineer III, duties are performed at the advanced journey level:*

- Provide public counter support to developers, builders, contractors and the general public pertaining to City engineering standards, policies, ordinances, etc.
- Process a variety of permit applications including encroachment, grading, temporary hydrant, and oversize/overweight permits.
- Investigate field problems affecting the public, property owners, contractors, and maintenance operations; collect the necessary data; develop recommendations and meet with the appropriate parties to discuss and implement recommendations.
- Inspect capital improvement and private development projects to ensure compliance with approved plans and specifications.
- Develop and maintain mapping systems.
- Perform technical drafting/CAD.
- Perform a variety of professional and technical engineering functions involving plan check and review, project management, permitting, and inspection of private and public improvement and development projects.
- Collaborate and confer with developers, architects, engineers, contractors, and the general public; provide information and assistance; interpret and explain laws, codes, and regulations related to development activities.
- Review various improvement plans and designs for accuracy and completeness; ensure compliance with local and state standards.
- Design various public works construction projects including grading, street lighting, water, recycled water, wastewater, streets, encroachments, curbs, gutters, paving, structures, and irrigation systems.
- Track and monitor status of construction progress and materials used.
- Coordinate projects with public works operations and maintenance staff.
- Develop and maintain mapping and GIS systems; make tracings, drawings, diagrams, and maps for public works projects, both manually and using a CAD program.
- Administer simple to complex engineering projects and contracts; estimate contract quantities and set costs; prepare change orders as necessary.
- Act as liaison between City, contractors, consultants, and developers; respond to and resolve questions.
- Attend and participate in professional group/team meetings; stay abreast of new trends, innovations, and developments in the public works civil engineering field.
- Perform a variety of related office or field tasks to gather, tabulate, analyze, interpret, display, and record data; prepare a variety of correspondence and reports related to projects.
- May provide direct or indirect supervision to lower level staff which may include assigning, reviewing, and evaluating work, approving leaves and time off, handling disciplinary matters, etc.
- Perform related duties as assigned.

EMPLOYMENT STANDARDS

Note: The level and scope of the knowledge, skills, and abilities listed in this section are related to the job duties as defined under Distinguishing Characteristics.

Knowledge of:

- Principles and practices of civil engineering as applied to various public works, traffic, and building construction projects.
- Methods, materials, and techniques used in the construction of various public works, building, and traffic projects.
- Modern developments, current literature, and sources of information regarding civil engineering and building codes and ordinances.
- Modern office procedures, methods, and computer equipment.
- Excellent customer service principles and techniques.

Ability to:

- Make and interpret engineering computations and check, design, and supervise the preparation of engineering plans and studies.
- Develop, review, and modify civil engineering plans, designs, and specifications.
- Perform civil engineering drafting work, both manually and using a CAD program.
- Perform technical research work and make detailed analyses.
- Prepare clear and concise technical and general reports.
- Communicate clearly and concisely, both orally and in writing.
- Proficiently use engineering and drafting software, instruments, and equipment.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Perform routine surveying and drafting work.
- Work independently with minimal supervision (for the higher levels).

Minimum Qualifications

Experience and/or Education:

Civil Engineer I:

A bachelor's degree from an accredited college or university with major in civil engineering; possession of an Engineer-in-Training Certificate is desirable.

Civil Engineer II:

EITHER: One year of experience as a Civil Engineer I with the City of American Canyon; **OR,**

One year of experience in professional civil engineering work; a bachelor's degree from an accredited college or university in civil engineering; and, possession of an Engineer-in-Training Certificate.

Civil Engineer III:

EITHER: Three years of experience as a Civil Engineer II with the City of American Canyon; **OR,** Four years of experience in professional civil engineering work; and, a bachelor's degree from an accredited college or university in civil engineering.

Registration:

Civil Engineer III Only.

Possession of a Certificate of Registration as a Professional Engineer in the State of California.

License Requirement:

All Levels - Possession of a valid California Class C Driver License at the time of appointment. Individuals who do not meet this requirement due to a physical disability will be reviewed on a case-by-case basis.

Probationary Period:

All Levels – Each level in the Civil Engineer series has a probationary period of twelve (12) months as the initial probationary period (initially hired into the City) and six (6) months as the promotional probationary period (promoted from one City job class to another City job class).

Physical Requirements:

Work is performed in typical indoor environment with some outdoor responsibilities. (1) Mobility: frequent use of keyboard; frequent sitting for long periods of time; moderate bending and squatting. (2) Lifting: frequently up to 10 pounds; occasionally up to 25 pounds. (3) Vision: constant use of overall vision; frequent reading and close-up work; occasional color and depth vision. (4) Dexterity: frequent repetitive motion; frequent writing; frequent grasping, holding, and reaching. (5) Hearing/Talking: frequent hearing and talking in person and on the phone. (6) Emotional/Psychological: frequent decision-making and concentration; frequent public and/or coworker contact; occasional working alone. (7) Environmental: frequent exposure to noise.

Classification	Adopted	Revised	Retitled	Class Code	FLSA Designation	Rep Unit
Civil Engineer I	1/1992	4/05	From Jr. Engineer 4/05	4323	Non-Exempt	04
Civil Engineer II	7/04	4/05	From Asst. Engineer 4/05	4311	Non-Exempt	04
Civil Engineer III	1995	4/05	From Assoc. Engineer 4/05	4313	Non-Exempt	04

APPROVED: _____
Human Resources Director

Date: _____