CIVIL ENGINEER I  
CIVIL ENGINEER II  
CIVIL ENGINEER III  

DEFINITION  
To perform professional and technical engineering work on a variety of projects associated with work programs in design, construction and traffic engineering; performs related work as required.  

DISTINGUISHING CHARACTERISTICS  
Civil Engineer I: This is the entry level class in the professional engineering series. Employees in this class possess the applicable educational and training background required of classes in the professional engineering series, yet typically lack practical work experience.  

This class differs from the Civil Engineer II and Civil Engineer III classes in that incumbents perform more routine tasks and duties assigned to positions within this series. Incumbents work under immediate supervision in the performance of job tasks.  

Civil Engineer II: This is the journey level class in the series. This class differs from Civil Engineer I in that incumbents perform the full range of duties as assigned. This class differs from Civil Engineer III in that incumbents in the higher class performs more complex design and technical work, as well as greater lead/supervisory responsibility. This level independently evaluates, selects and applies standard engineering techniques, procedures and criteria to solve engineering problems.  

Civil Engineer III: Incumbents in this class are expected to perform difficult engineering assignments under the direction and guidance of the City Engineer. This is distinguished from the City Engineer who will be responsible for the administrative direction and control of the engineering division and all projects. This level directs and reviews the work of lower level engineering personnel.  

SUPERVISION RECEIVED AND EXERCISED  
Civil Engineer I: Receives immediate supervision and direction from a higher level professional engineer.  

May give technical or functional direction to technical staff within the engineering division.  

Civil Engineer II: Receives general supervision/direction from a higher level professional engineer.  

May incidentally give direction to lower level engineering staff.
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SUPERVISION RECEIVED AND EXERCISED (continued)

Civil Engineer III: Receives direction from the City Engineer.

Provides lead direction to lower level professional and technical staff.

EXAMPLES OF DUTIES

Duties may include, but are not limited to, the following:

➢ Reviews plans related to structures such as streets, sidewalks, gutters and other offsite construction; check plans for conformance with regulations regarding line, grade, size, elevation and location of structures; check calculations.

➢ Maintains records of all plans and contract documents.

➢ Prepares progress reports, inspects construction work and initiates payments due.

➢ Investigates field problems affecting property owners, contractors and maintenance operations.

➢ Coordinates assigned activities with consultants, engineers, developers, contractors, other city departments and divisions and with outside agencies.

➢ Develops plans, specifications and other contract documents.

➢ Provides technical and professional engineering support services in design, construction and traffic engineering.

➢ Prepares special engineering studies and reports; performs special assignments on engineering problems, as necessary.

➢ Prepares estimates and specifications.

➢ Prepares preliminary and final plans and designs for a variety of construction and maintenance projects.

➢ Directs the work of lower level engineering staff on specific projects; delegates work to subordinate staff.

➢ Plans, directs and participates in surveying activities; researches title reports, deeds and other records in preparation of survey instructions.

➢ Works directly with public boards, commissions and regulatory agencies.

QUALIFICATIONS

Civil Engineer I:
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Civil Engineer I: (continued)

Knowledge Of:
Principles and practices of civil engineering; applicable laws and regulatory codes; methods, materials, tools and equipment used in engineering construction; principles of algebra, geometry and trigonometry and their application to engineering.

Ability To:
➢ Prepare plans and drawings neatly and accurately; learn applicable City ordinances and regulatory codes policies and procedures applicable to engineering functions.
➢ Communicate effectively, orally and in writing.
➢ Operate engineering tools and equipment including blueprint and copying machines.
➢ Establish and maintain effective working relationships with other employees, contractors and the public.
➢ Prepare clear, concise, complete reports on technical materials; make effective cost estimates and recommendations.
➢ Meet the physical requirements which are necessary to perform the duties of the job.

EXPERIENCE AND EDUCATION
Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be equivalent to a Bachelor of Science degree from an accredited college or university with major course work in Civil Engineering.

LICENSES OR CERTIFICATES
Possession of a valid California Driver’s license and have a satisfactory driving record.

Possession of an Engineering-in-Training Certificate issued by the State of California. The Engineering-in-Training requirement may be substituted for a Bachelor of Science degree in Civil Engineering.

Civil Engineer II:
In addition to the knowledge and abilities requirements for the Civil Engineer I:

Knowledge Of:
Title and record search procedures; a municipal Public Works Department’s function; report writing including appropriate format, grammar, spelling and punctuation.
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Ability To:

➢ Prepare plans, designs, specifications and cost estimates for all types of Public Works projects.

Ability To: (continued)

➢ Delegate, monitor and review the work of subordinate personnel; create short-term and long-term work plans.

➢ Conduct title, deed and record searches; conduct project research; calculate cost estimates, field and report data.

EXPERIENCE AND EDUCATION

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 responsible civil engineering experience comparable to that of a Civil Engineer I in the City of Union City.

Education: Equivalent to a Bachelor’s degree from an accredited college or university with major course work in civil engineering.

LICENSES AND CERTIFICATES


Possession of a State of California Driver’s license and have a satisfactory driving record.

Civil Engineer III

In addition to the knowledge and abilities requirements for the Civil Engineer I and Civil Engineer II:

Knowledge Of:
The basic functions and techniques of supervision.

Ability To:
Train, assign, monitor and evaluate the work of subordinate engineering staff.

EXPERIENCE AND EDUCATION

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 responsible civil engineering experience comparable to that of a Civil Engineer II in the City of Union City, which includes one year of lead/supervisory experience.
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Education:
Equivalent to a Bachelor’s degree from an accredited college or university with major course work in civil engineering.

LICENSES OR CERTIFICATES
Registration as a Professional Engineer in the State of California, or be eligible to obtain registration as a Professional Engineer in the State of California at time of employment with the City as a Civil Engineer III. Registration as a Professional Engineer with the State of California within one year of employment as a Civil Engineer III is desirable.

Possession of a valid California Driver’s license and have a satisfactory driving record.