

JUNIOR ENGINEER ASSISTANT ENGINEER

DEFINITION

To perform professional and technical civil engineering work in the design, construction and maintenance of public works facilities.

DISTINGUISHING CHARACTERISTICS

<u>Junior Engineer</u>: This is the entry level class in the professional engineering series. Positions in this class normally perform responsible but less difficult types of professional engineering office and field work. Under the training concept, positions assigned to the class of Assistant Engineer which become vacant may reasonably be filled at the Junior Engineer level, with the understanding that future reassignment to the Assistant Engineer class in most cases is to be expected.

<u>Assistant Engineer</u>: This is the journey level in the professional engineering series. Positions assigned to this class are expected to perform responsible and difficult types of professional engineering office and field work. All positions assigned to this class require the ability to work independently, exercising judgment and initiative. Assistant Engineer may also be expected to assist in the supervision and training of technical staff.

SUPERVISION RECEIVED AND EXERCISED

<u>Junior Engineer:</u> Immediate supervision is provided by the City Engineer or his/her designee. <u>Assistant Engineer:</u> General direction is provided by the City Engineer or his/her designee. Responsibilities include direct and indirect supervision of technical personnel.

EXAMPLES OF DUTIES

The following are typical illustrations of duties encompassed by the job series, but are not an all inclusive or limiting list:

ESSENTIAL JOB FUNCTIONS:

Assist in conducting preliminary studies of engineering projects and help prepare plans for public improvements such as streets, storm drains, sewers, water works, and other public projects

Supervise, coordinate and perform professional engineering work in the design and construction of, streets, sidewalks, water and sewage facilities, and drainage structures, and other public work.

Review plans, maps, specifications, cost estimates, and other work for accuracy, presentation, and conformance with established engineering practices.

Perform field inspections of public works construction projects, materials testing, survey work and calculations.

Prepare preliminary drawings for public works projects, tabulate field data, design improvement plans, specifications, contracts, and other documents.

Make calculations in surveying and other construction work.

Assist in preparation of long-range capital improvement programs and budgets.

Prepare written staff reports for departmental use and/or presentation to the City Council and City Commissions.

Respond to citizen complaints and questions.

Assist with property development agreements

Prepare plans and legal descriptions for right-of-way acquisition.

Prepare reports and applications for State and Federal funding.

Supervise, train and evaluate assigned staff.

Perform related duties as assigned.

QUALIFICATIONS

Junior Engineer

Knowledge of:

Engineering mathematics, physics, drawing and instruments of the profession.

Principles and practices of engineering field and office procedures.

Uses of drafting, surveying, and other engineering instruments and tools.

Methods, materials, tools and equipment used in engineering construction;

Skill to:

Read and interpret plans and specifications.

Make engineering design computations and check, design, and prepare engineering plans and studies.

Understand and follow oral and written directions.

Communicate effectively, both orally and in writing.

Perform a variety of mathematical/engineering computations;

Learn and interpret City ordinances and department policies pertaining to Public Works.

Establish and maintain effective work relationships with those contacted in the performance of required duties.

Ability to:

Meet the physical requirements necessary to safely and effectively perform the assigned duties.

Education and Experience

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:

Education

Equivalent to a Bachelor's Degree from an accredited college or university with major course work in civil engineering.

Experience:

None required

License or Certificate

Possession of a valid California Driver's License.

Assistant Engineer

In addition to the qualifications for Junior Engineer.

Knowledge of:

Techniques for preparing designs, plans, specifications, estimates, reports and recommendations related to public works.

Municipal operations as they relate to other City departments and divisions.

Techniques of contract administration.

Recent developments, current literature, and sources of information regarding civil engineering.

Principles and practices of budgeting, supervision and training.

Skills to:

Use a variety of drafting and engineering apparatus.

Communicate clearly and concisely, both orally and in writing.

Supervise, train and evaluate assigned staff.

Education and Experience

Education:

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

Experience:

Two years of increasingly responsible work experience in civil engineering or a closely related field.

License

Possession of a valid California driver's license.

Additional Desirable Qualifications:

Possession of a valid Engineer in Training (EIT) Certificate.

	Council Action:	
Human Resources		