

## CITY OF LINCOLN

### ENGINEER TECHNICIAN I/II/III

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

#### **DEFINITION:**

Under supervision, performs a variety of para-professional engineering drafting work in the office and in the field; involving drafting, surveying, mapping and related engineering activities maintains appropriate work records; performs other related duties as required.

#### **DISTINGUISHING CHARACTERISTICS:**

The **Engineer Technician I** is an entry-level class in the professional civil engineering series and is responsible for performing the more routine tasks and duties of entry-level para-professional engineering work not requiring registration as a Civil Engineer. This classification is distinguished from the next higher classification of Engineer Technician II in that the latter performs more complex assignments with less direct supervision.

The **Engineer Technician II** is the journey level class within the Engineering Technician series. Incumbents are expected to perform the scope of complex Engineering Technician duties. This class is distinguished from the Engineering Technician I by the performance of the full range of duties as assigned and the ability to work independently. This classification is distinguished from the next higher classification of Engineer Technician III in that the latter performs the more complex and difficult assignments within the division.

The **Engineering Technician III** is the advanced journey level class within the Engineering Technician series. Incumbents are distinguished from other classes within the series by the complex level of responsibility assumed of assigned duties, independence of action taken and the level of technical duties.

#### **SUPERVISION RECEIVED/EXERCISED:**

##### **Engineer Technician I**

Receives supervision from the higher Technician series levels and/or from the Public Works Civil Engineer. Incumbent does not have supervisory responsibilities.

##### **Engineer Technician II**

Receives general supervision from higher Technician series levels and/or the Public Works Civil Engineer. Incumbent may exercise functional supervision over Technicians.

##### **Engineer Technician III**

Receives general supervision from the Public Works Civil Engineer. Exercises functional and technical

supervision over Technicians.

**ESSENTIAL FUNCTIONS:** *(include but are not limited to the following)*

- Aid in the performance of entry-level professional engineering work not requiring registration as a Civil Engineer.
- On a continuous basis, know and understand all aspects of the job.
- Aid in the calculation of quantities and cost estimates for construction projects.
- Identify and interpret technical and numerical information.
- Observe and assist in problem solving operational situations and technical policies and procedures.
- Be familiar with regulations and procedures so as to aid consultants, contractors, developers, the general public, and representatives of other public agencies and other City staff.
- Assist with the preparation and checking of engineering plans and specifications.
- Assist in preparing and checking of engineering reports and studies.
- Understand City engineering policies and procedures.
- Become familiar with and gain an understanding of applicable laws and regulatory codes in various areas of assigned responsibility, including design, construction, land development, transportation and traffic planning, surveying and mapping, solid waste and landfill operations, storm control and flood control engineering.
- Assist in the preparation of accurate cost estimates and/or budgets, project schedules, and personnel resources needed for project completion/program accomplishment.
- Assist in the preparation of effective technical reports with recommendations and finds.
- Auto CAD mapping.
- Serve as survey party chief directing the work of other department staff.
- Create and maintain an accurate and effective City-wide GIS system.
- Create and integrate new data sources into the City's overall GIS.
- Prepare a variety of maps and exhibits for the City departments and meetings.
- Interpret engineering maps, plans, construction standards and legal descriptions.
- Utilize computer-assisted drafting software to create and modify engineering drawings, topographic maps, improvement plans and illustrative graphics.
- Design simple public works projects by researching existing facilities, design manuals, and City standards; applying knowledge of engineering principles and researched information to conceptualize and sketch designs; analyzing costs of alternative designs and preparing construction plans.
- Establish positive working relationships with representatives of community organizations, state/local agencies, City management and staff, and the public.

**PHYSICAL, MENTAL AND ENVIRONMENTAL WORKING CONDITIONS:**

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping, crawling and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment, and acute hearing is required when providing phone and face-to-face service. The need to lift, carry, pull and push tools, supplies and other equipment weighing up to 25 pounds is also required. Additionally, the incumbent in this position works outdoors in all weather conditions including wet, hot and cold. The position entails working in situations that may expose the employee to fumes or airborne particles, electrical shock or mechanical hazards. The nature of the work also requires the incumbent to climb ladders and drive motorized vehicles.

**QUALIFICATIONS:** *(The following are minimal qualifications necessary for entry into the classification.)*

**Education and/or Experience:**

Any combination of education and experience that has provided the knowledge, abilities and skills necessary for an **Engineer Technician**.

**Engineer Technician I**

Two years of increasingly responsible Civil Engineering Technician experience, and an associate science certificate/degree in an engineering or related field.

**Engineer Technician II**

In addition to the qualifications of an Engineer Technician I, two additional years of experience.

**Engineer Technician III**

In addition to the qualifications of an Engineer Technician II, two additional years of experience.

**License/Certificate:**

Possession of, or ability to obtain, a valid Class C California driver's license.

**KNOWLEDGE/ABILITIES/SKILLS:** *(The following are a representative sample of the KAS's necessary to perform essential duties of the position.)*

**Knowledge of:**

Surveying techniques and practices; engineering maps and records; computer aided drafting, (CAD); basic principles of mathematics; ability to become familiar with applicable federal, state and local laws, codes, and regulations including City, county and state building codes; methods and techniques of scheduling work assignments; standard office procedures, practices and equipment; modern office equipment including a computer and applicable software; methods and techniques for record keeping and report preparation and writing; proper English, spelling and grammar; occupational hazards and standard safety practices.

**Ability to:**

Make engineering computations; perform engineering drafting work; reducing, interpreting and applying field notes in the performance of drafting duties; organize, prioritize and follow-up on work assignments; work independently and as part of a team; make sound decisions within established guidelines; analyze a complex issue, and develop and implement an appropriate response; follow written and oral directions; observe safety principles and work in a safe manner; communicate clearly and concisely, both orally and in writing; establish and maintain effective working relationships.

**Skill to:**

Operate an office computer and a variety of word processing, engineering and graphic information software applications; safely and effectively operate engineering tools and equipment.

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**Salary Range:**

Engineer Technician I

Professional/Admin Special

Engineer Technician II

14

Engineer Technician III

16

**FLSA:**

Nonexempt

**Employee Group:**

Professional/Admin. Group

**Adopted:**