CITY OF SONOMA ENGINEERING TECHNICIAN I/II

DEFINITION

Under direction, performs a wide variety of difficult technical, subprofessional engineering, construction inspection, surveying, material testing, field work, public coordination, utility and office engineering including but not limited to encroachment permitting, plan check, conditioning; and performs related duties as required.

DISTINGUISHING CHARACTERISTICS

Engineering Technician I

This is the entry level position in the professional Engineering Technician class series. Incumbents are provided training to enable them to gather, analyze, and monitor routine engineering-related data and formulate recommendations based on established criteria in the area of assignment. Incumbents are expected to perform the full range of duties as assigned with increasing independence.

Engineering Technician II

The journey level class in which incumbents are expected under general supervision to be fully competent to perform the full range of duties assigned. Incumbent should perform advanced, paraprofessional engineering office and field work; provide support to staff members and professional engineers and provide lead direction in an assigned engineering specialty function. This class is distinguished from the Engineering Technician I in that the routine technical work assignments of this class are performed more independently.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Public Works Director/City Engineer.

<u>EXAMPLES OF ESSENTIAL DUTIES</u> - Duties may include, but are not limited to, the following:

Locate utilities, easements, property lines, and/or other information on plans; perform and check mathematical, computer, and/or statistical calculations used in engineering tasks; perform field investigations and/or inspections of existing conditions and new construction; collect, compile, and/or analyze data and/or field samples; notify contractors of discrepancies between work performed and the approved plans, specifications, and standards.

Review encroachment permits, as well as other drawings for conformance with established engineering standards; process permit applications and issue permits; determine and collect fees.

Inspect for compliance with plans and specifications the methods or materials being used on major construction projects including subdivisions; inspection may include the methods and materials used in the construction of streets, alleys, sidewalk, curbs, gutters, storm drains, reservoirs, catch basins, driveways, approaches, culverts, water and projects, and municipal buildings; reviews and interprets constructions plans and specifications, and consults with supervisor on deviations.

Respond to complaints, inquiries, and requests from information from other departments, outside agencies, and the public concerning plan checking, permit requirements, and other engineering activities in person or over the telephone.

Read and understand record drawings, parcel maps, subdivision maps, zoning maps, improvement plans, and specifications.

Use a variety of engineering office equipment; maintain engineering records; file information using numerical, alphabetical, and chronological and/or reverse chronological filing systems.

Understand and apply City and state design standards and specifications.

Understand and apply ADA upgrade and code through implementation of California building California Building Code (based on IBC or International Building Code), 2019 PROWAG (Public Right of Way Accessibility Guidelines) and the 2010 ADA Standards.

Identify discrepancies between plans and construction in the field.

Assist in the technical analysis of public works data and generation of necessary reporting associated with the analysis.

May attend other meetings as necessary

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Foster an environment that embraces diversity, integrity, trust, and respect.

Be an integral team player, which involves flexibility, cooperation, and communication. Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Pertinent federal, state and local laws, codes, and regulations affecting ADA, Caltrans.

Methods and techniques of inspection, investigation, and code enforcement.

Applicable City and state codes, policies, and procedures; principles of project planning.

Principles and practices of record keeping and records management

Principles and practices of chemistry, hydrology and geology.

Methods and techniques of data collection, research, and report preparation.

Familiarity with AutoCAD and GIS software desired.

Ability to:

Plan, organize, coordinate, and permits and projects.

On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports, and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures.

On a continuous basis, work outside in different types of weather while exposed to heavy traffic, noise, dust, fumes, vibrations, airborne particles, noxious odors, grease oil, cleaning chemicals, paint, glues, solvents, and spills. Intermittently, sit while driving a piece of equipment; stand and walk over rough, uneven or rocky surfaces while performing maintenance activities; bend and twist to adjust equipment; kneel and squat to review work; climb ladders or climb up on to heavy equipment to begin operations; perform duties in cramped areas such as trenches, vaults, and manholes; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weight of 50 pounds or less.

Conduct accurate and thorough research; prepare accurate and concise analysis, reports, and recommendations.

Understand, interpret, explain and apply federal, state, and local policies, laws, and regulations.

Apply procedures and techniques involved in the investigation, documentation, and enforcement of codes and regulations.

Use sound judgment in recognizing scope of authority.

Operate and use modern office equipment including computers and applicable software.

Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.

Utilize appropriate safety procedures and practices for assigned duties.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner. Communicate clearly and concisely, both orally and in writing.

Experience and Education

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

Experience:

Two years of experience in technical support work in the field of public works.

Education:

Equivalent to graduation from high school, supplemented by courses in trigonometry and computer aided design and drafting. College level course work in mathematics, computer-aided design, construction practices, surveying, and other related courses are desirable.

Engineering Technician II:

In addition to the above, two years of public works experience equivalent to that of an Engineering Technician I in the City of Sonoma.

License and Certificate

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