

CITY OF SALINAS

JUNIOR ENGINEER

BARGAINING UNIT/CLASS CODE:

SMEA / F08

DEFINITION

To perform entry level professional engineering work in the design, investigation, and construction of public works and traffic engineering projects; and to serve as a member of an engineering design or traffic team.

DISTINGUISHING CHARACTERISTICS

This is the entry-level professional engineer classification. Incumbents perform office and field engineering work of low to moderate complexity under general supervision in preparation for advancement to the journey level of Assistant Engineer. Assignments are generally performed within a framework of established procedures.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from a higher-level professional engineer or Transportation Planner. Technical or functional supervision may also be provided by higher-level professional engineers. Assignments may require indirect supervision of lower level technical engineering positions.

ESSENTIAL JOB FUNCTIONS OF THE POSITION Duties may include, but are not limited to the following:

Prepare plans, specifications, and cost estimates for less complex public works and traffic engineering projects including streets, storm drains, sewer lines, traffic signals, street lights and related projects; research design requirements and perform calculations. Assist with coordination of engineering and traffic projects between contractors and the City. Assist with administering and enforcing of City codes and standards on engineering projects. Perform plan checks to insure contractor compliance with City specifications. Respond to citizen complaints concerning engineering/traffic problems. Perform engineering and traffic calculations. Perform field inspections of various engineering projects. Analyze materials and design data submitted to the City. Perform SYNCHRO/Traffic Controller/service level programming. Analyze simple traffic requests. Determine conformance of parcel and subdivision maps and improvement plans to City requirements; maintain status of parcel and subdivision maps. Promote and maintain safety in the work place. Write council reports, letters, memos and related written documents. Perform related duties as assigned.

PHYSICAL AND MENTAL CHARACTERISTICS

Physical, mental and emotional stamina to perform the duties and responsibilities of the position; manual dexterity sufficient to write, use telephone, computer, business machines and related equipment; vision sufficient to read printed materials, visual display terminals, detailed fine writing on plans and specifications for development projects, and distinguish colors for design evaluation purposes; hearing sufficient to conduct in person and telephone conversations; speaking ability in an understandable voice with sufficient volume to be heard in a normal conversational distance, on the telephone and in addressing groups; physical agility to push/pull, squat, twist, turn, bend, stoop and reach overhead as needed; physical mobility sufficient to move about the work environment, physical strength to lift up to 20 lbs.; physical stamina sufficient to sit for prolonged periods of time; mental acuity to collect and interpret data, evaluate, reason, define problems, establish facts, draw valid conclusions, make valid judgments and decisions.

WORKING CONDITIONS

Business office working environment subject to sitting at a desk for long periods of time, bending, crouching, or kneeling at files, pushing/pulling of file drawers and supplies, reaching in all directions and prolonged periods of time working at a computer terminal. Occasionally include driving to job sites, training and out-of office meetings.

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Also includes fieldwork consisting of activities noted above, with similar physical demands noted in the business office work environment.

QUALIFICATIONS

Knowledge of:

Principles and practice of civil engineering and traffic engineering as applied to public works engineering. Methods, materials, and techniques used in the construction of public works projects. Engineering/traffic equipment, modern development practices, current literature, and sources of information regarding civil/traffic engineering. Topographic and construction surveying. Operation of personal computers.

Ability to:

Make engineering design/traffic computations and check, design and prepare engineering/traffic plans, studies, profiles, and maps. Use and care for drafting and surveying instruments. Learn applicable laws and regulatory codes applicable to areas of assignment. Prepare reports using technical data. Learn and understand City engineering and traffic policies and procedures. Make material and cost estimates. Establish and maintain cooperative working relationships. Promote the mission, values and standards of an effective public organization, particularly in the area of customer service.

Skills to:

Perform design and traffic engineering functions; prepare plans, drawings, specifications, diagrams and sketches pertaining to public works construction and development projects; field review projects for compliance to City standards.

License or Certificate:

Possession of a valid California (Class C) Driver's License.

Education and Experience:

An example of the education and experience which most likely demonstrates the skills, knowledge and abilities required to perform the duties would be any combination equivalent to a four year degree in civil engineering or a related field.

Reviewed _____
Department Director

Approved _____
Human Resources Officer

Approval Date: _____

ORIG: 2-84, REV: 1-99, REV: 07/06