CITY OF MADERA

ASSISTANT ENGINEER

*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 general supervision, performs professional engineering work in the design, evaluation and construction of street, storm, sewer, and other public work projects; reviews engineering reports, drawings and calculations for buildings, structures, streets, sewers and other public works facilities to ensure compliance with codes, regulations and ordinances; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

The **Assistant Engineer** is the entry level class in the professional engineering series. Incumbents are expected to perform the full scope of assigned duties. Assignments are generally limited in scope and performed within an established procedural framework. This classification is distinguished from the next higher classification of Associate Civil Engineer in that the latter requires registration as a Civil Engineer in the state of California, performs more difficult and complex civil engineering tasks.

SUPERVISION RECEIVED/EXERCISED:

Receives general supervision from the City Engineer and Senior Engineer. Incumbents of this class do not routinely exercise supervision.

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

- Performs a broad range of routine design activities on a variety of public works projects including street, storm drainage, sewer, water and park irrigation systems.

- Prepares plans and specifications; prepares quantity and cost estimates; assists in the development of design procedures; interprets the application of design criteria; checks plans and specifications for accuracy of design and completeness.

- Assists the resident engineer on large and complex public works construction projects or acts as resident engineer on medium to small construction projects; coordinates capital improvement projects with contractors, utility companies, other agencies and the general public.

- Interprets, plots and supervises field survey data; performs field inspections; administers construction contracts; prepares daily progress and final reports when assigned to field duties.

- Interprets codes and regulations in the performance of plan check activities; calculates building valuation; coordinates plan review process with other departments and agencies.

- Administers and enforces City codes and standards on engineering projects; addresses and responds

to citizen complaints related to engineering problems.

- Establishes positive working relationships with representatives of community organizations, state/local agencies, City management and staff, and the public.

WORKING CONDITIONS:

Position requires sitting, standing, walking on level, uneven 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, skills and abilities necessary for an **Assistant Engineer** may be considered qualifying. A typical way of obtaining the required qualifications is to possess the equivalent of three years of para-professional Engineering experience or three or more years of college level coursework in Civil Engineering and possession of a valid Engineer-in-Training issued by the California State Board of Registration for Civil and Professional Engineers.

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:

Principles, procedures, practices and standards of municipal engineering; surveying methods and techniques; strength of materials and stress analysis; municipal engineering laws, ordinances, codes, specifications and plans; applicable federal, state and local laws, codes, and regulations including Madera Municipal Code, ordinances, and codes related to building construction; engineering project inspection methods; working knowledge of contract administration; modern office practices, methods and equipment, including a computer and applicable software; operational characteristics and use of standard equipment used in the engineering profession; occupational hazards and standard safety procedures.

Ability to:

Prepare accurate plans, specifications, cost estimates and engineering reports; make accurate engineering computations; analyze and evaluate design drawings and specifications; learn and apply established principles and practices of municipal civil engineering; promote and enforce safe work practices; 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 and software applications; safely and effectively operate engineering tools and equipment.