City of Fresno 210100

PROFESSIONAL ENGINEER

Class Definition

Under direction, performs difficult professional engineering work involving design, investigation, development and construction of public and private structures, mechanical equipment and systems.

Distinguishing Characteristics

Professional Engineer is the professional working level class in the engineering series. Incumbents may specialize in civil, electrical, fire protection, geotechnical, structural, mechanical, sanitary or traffic engineering. Assignments are given in general terms and considerable judgment, latitude and initiative are expected in order to complete office and field projects. Incumbents may supervise, coordinate, and evaluate the performance of personnel engaged in technical engineering activities. Professional Engineer is distinguished from Engineer II in that the latter does not require professional registration. It is distinguished from Supervising Professional Engineer in that incumbents in the latter perform a higher level of professional and administrative engineering work and generally have on-going supervisory responsibilities over Professional Engineers.

Typical Tasks

(This list is neither inclusive nor exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Performs specialized, complex professional engineering work relating to civil, electrical, fire protection, geotechnical, structural, mechanical, sanitary or traffic engineering activities which may involve the review of plans and specifications of buildings, structures or utilities engineering systems for compliance with applicable state and federal regulations and codes, accepted engineering practices and City standards.

Consults with internal and external staff providing professional advice and design services in the preparation of plans and related tasks.

Gathers and analyzes a variety of data concerning engineering, architectural, or mechanical projects and problems; prepares recommendations and comprehensive reports.

May supervise a team of pre-professional and technical engineering staff in carrying out the functions of assigned work unit.

Performs related duties as required

Knowledge, Abilities and Skills

Knowledge of the principles and practices of civil, structural, mechanical, sanitary, and/or traffic engineering relating to the preparation and evaluation of plans and specifications for public and/or private construction.

Knowledge of construction methods, materials, and of approved standards of safety relating to assigned field.

Knowledge of local, state and federal regulations, codes and requirements pertinent to the area of assignment.

Ability to plan, assign, supervise and evaluate the work of others.

Ability to execute difficult engineering computations, and prepare estimates, designs, plans and specifications.

Ability to use automated systems and related office technology.

Ability to communicate effectively, both orally and in writing.

Ability to establish and maintain effective working relationships with those contacted in the performance of required duties.

Minimum Qualifications

Valid registration as a professional engineer by the State of California at time of application.

Special Requirement

Possession of a valid California Driver's License may be required at time of appointment.

Recruitment may be limited to a specific area of expertise as required by operational needs. Areas of expertise include, but are not limited to those listed below:

- 1. Civil Engineering
- 2. Electrical Engineering
- 3. Fire Protection Engineering
- 4. Geotechnical Engineering
- 5. Mechanical Engineering
- 6. Sanitary Engineering
- 7. Structural Engineering
- 8. Traffic Engineering

APPROVED: <u>(Signature on File)</u>	DATE: <u>09/24/1999</u>
Director	