CITY OF FOLSOM

FIRE PROTECTION ENGINEER

DEFINITION

Under direction, performs professional fire protection engineering activities of a complex nature involving the plan review and field inspection of fire and life safety related aspects of commercial, industrial and residential building construction and new development projects to ensure conformance with applicable laws, ordinances, standards, plans, specifications, and departmental regulations. Located in the Fire Department, this is a non-safety position.

DISTINGUISHING CHARACTERISTICS

NOTE: The following are the duties performed by employees in this classification. However, employees may perform other related duties at an equivalent level. Each Individual in the classification does not necessarily perform all the duties listed.

Exercises technical and functional supervision over fire prevention personnel. This is the first supervisory level in fire protection engineering.

EXAMPLES OF ESSENTIAL DUTIES

- Coordinate the flow of assigned work among fire plan checkers and fire inspectors.
- Checks plans and specifications for accuracy, suitability, and completeness and make recommendations for revision and improvement.
- Examine public, commercial, industrial, and residential construction documents of proposed structures for compliance with all codes and ordinances for fire and life safety and emergency vehicle access.
- Perform hydraulic calculations to determine adherence of fire extinguishing system plans and civil engineering water supply plans to code requirements.
- Correct defects and/or inadequacies in construction documents and require that corrections be made to meet pertinent federal, state, and city codes.
- Provide interpretations and technical advice to developers, engineers, contractors, architects, owners, city staff, and the general public on proposed projects to resolve problems.
- Prepare memoranda, letters, and reports and make recommendations on solutions resulting from plans review and field inspections.
- Prepare written correspondence to building owners or tenants regarding violations and required corrective actions and follow up to assure compliance.
- Explain disapprovals and modification recommendations to applicants for permits.
- Inspect private and public buildings for compliance with life-safety, building, and fire-safety standards as mandated by federal, state, and city codes.
- Review site and building plans and inspect private and public buildings under construction for compliance with applicable code sections that relate to fire and life-

safety, built-in early detection and suppression systems as well as materials and methods used in construction.
- Evaluate, approve, and issue permits for the design and installation of fire extinguishing and alarm systems.
- Conduct field investigations of structural problems, covering failures, instability, proper installation of unusual designs, materials, or equipment, and other unsafe conditions.
- Receive and respond to telephone inquiries or complaints.
- Manage the administration of contracts and financial billing information for outside consultants and contracted fire plan checking services.
- Prepare and maintain records of inspections for all buildings.
- Confer and coordinate with other agencies and city departments.
- Assist with the interpretation and analysis of fire codes, ordinances and standards to make recommendations for changes and amendments.
- Attend various board, commission, and committee meetings.
- Perform related duties as assigned.

EMPLOYMENT STANDARDS

NOTE: The level and scope of the following knowledge and abilities are related to duties listed under the "Examples of Essential Duties" section of this specification.

Knowledge of:

- Principles and practices of fire protection engineering as applied to local standards, codes and ordinances.
- Modern methods, techniques and building materials used in the design and construction of a wide variety of buildings and fire protections systems.
- Practices applied to plans and specifications.
- Applicable federal, state, and local codes and ordinances pertaining to fire and life-safety and building construction.
- Principles and techniques of personnel management, supervision and training.
- Common word processing, spreadsheet, and database software.
- Hazardous materials and their proper use and storage requirements.
- Fire extinguishing and detection systems.
- Principles and practices of basic fire science, fire technology, and fire behavior.
- Mathematical calculations.
- Procedures and techniques of field inspections to include building and site inspection.

Ability to:

- Prepare specifications and write technical reports.
- Plan, coordinate, and prioritize assigned work.
- Coordinate and oversee the work of assigned staff.

- Understand, interpret and apply, and enforce federal, state, and local fire and life-safety codes and regulations with impartiality and efficiency.
- Read and interpret building and fire protection plans, specifications, and codes.
- Perform complex engineering and mathematical computations rapidly and accurately.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Understand and interpret development plans, construction drawings and specifications.
- Understand legal descriptions and boundary maps of real property.
- Conduct functional tests and field inspections of fire detection and suppression systems at construction sites.
- Enforce pertinent codes and ordinances.
- Respond to inquiries, complaints, and requests for service in a fair, tactful, and firm manner.
- Effectively communicate verbally and in writing.
- Maintain records and prepare reports.

Minimum Qualifications:

Education:
A bachelor's degree in fire engineering from an accredited college or university.

Experience:
Two (2) years of full-time fire prevention inspection experience in a governmental fire prevention bureau or agency.

OR

Five (5) years of experience performing fire protection engineering relative to building and site development design; review and inspection work related to fire and building code compliance; and supervisory experience.

License, Certificate, Registration Requirements:

- Possession of, or the ability to obtain and retain a California Class C driver license by the time of appointment. Individuals who do not meet this requirement due to a disability will be reviewed on a case-by-case basis.
- Possession of a valid Certificate of Registration as a Fire Protection Engineer in the State of California.

Physical Requirements:

Work is performed in a typical office/field environment. (1) Mobility: frequent use of a keyboard; frequent sitting, standing, and walking; occasional bending or squatting. (2) Lifting: frequently up to 10 pounds; occasionally up to 50 pounds. (3) Vision: constant use of overall vision; frequent reading and close-up work; occasional color and depth vision. (4) Dexterity: frequent repetitive motion; frequent writing; frequent grasping, holding, and reaching. (5) Hearing/Talking: frequent hearing and talking in person and

on the phone, occasionally via two-way radio. (6) Emotional/Psychological: frequent decision-making and concentration; frequent public and co-worker contact; occasional working alone. (7) Environmental: frequent exposure to noise; occasionally working outside in the summer and winter; work occasionally on rough, uneven, and slippery surfaces; occasionally work around machinery with moving parts or stationary equipment; occasionally work below ground and in confined spaces, occasional exposure to chemical, fumes, and other environmental substances.

Information Block

Class Code:
FLSA Status:
Established:
Revised:
Retitled:
Workers Compensation Code:
Bargaining Unit: