

# Fire Protection Engineer

## Monthly Salary Range

8,496.00 - 10,867.00

## Job Summary

The City of Vancouver, Washington is located on the shores of the Columbia River, approximately ten miles north of Portland, Oregon. With a population of nearly 200,000, Vancouver is the fourth largest city in Washington State. The City is one of the nation's most livable cities, with a growing economy, an exemplary education system, and access to high quality health care, housing, transportation, parks, and many other amenities. The City of Vancouver is in a period of significant growth and urbanization, adding more than 30,000 residents in the last 10 years, and has a current development pipeline that could add as many as 30,000 more residents in the next 6-10 years. There are multiple urban center development planned or underway across the City, such as The Waterfront Vancouver, a 32-acre, high density, mixed use urban development anchored by the signature 7.3-acre Vancouver Waterfront Park; the 63 acre City-led Heights District redevelopment project, the 172 acre mixed use Vancouver Innovation Center, and the 200+ acre Riverview Gateway District, which includes the HQ redevelopment and Columbia Palisades mixed use centers.

The Vancouver Fire Marshal's Office is currently recruiting for the position of Fire Protection Engineer. The Fire Protection Engineer performs complex technical reviews and code compliance assessments combined with fire protection engineering principles, practices, laws and regulations on fire protection systems, sprinkler and fire alarm evaluations, performance-based fire engineering design, high-rise structures and smoke control management systems and other hazardous occupancy classifications. Ensures plans and processes adhere to federal, state, local codes and regulations, national standards and best practices; makes recommendations to achieve code compliance and adhere to rules, laws and regulations. Provides technical expertise to fire and life safety plan reviewers, fire inspectors, consultants, developers and contractors.

This is a full-time, regular, non-exempt union position. This position is covered under the provisions of an agreement between the City and the Vancouver Fire Department Guild.

## Job Details

Essential Functions:

- Complete technical, complex and performance-based fire and life safety plans review, calculations, and specifications for new and existing construction/development projects, including but not limited to: fire protection systems, occupancy hazards, special manufacturing risks, hazardous materials, smoke control management passive and active systems, etc. are in accordance with State, local, national standards and requirements. Upon completion, enter the technical review and inspection findings into the City's records management system. Escalate inspection findings to supervisor if necessary.

- Through the assessment of designs, calculations, sketches and/or diagrams, identify fire-related risks and reduce or eliminating hazards, through building/fire codes and known human behavior in emergency incidents.
- As a fire code official, advises architects, designers, contractors, and developers on fire and life safety code and design requirements; meet with contractors and developers for pre-application meetings, meetings to resolve compliance questions and/or technical questions.
- Recognize and evaluate engineering site plans associated with emergency access and water supply requirements as it relates to construction and/or building design.
- Critically evaluate fire modelling design submissions and associated engineering software.
- Continuously review, and maintain a working knowledge of, changing codes, standards, industry specifications and practices to ensure compliance.
- Acts as an expert witness in court and judicial proceedings, when required.
- Compile and prepare formal inspection reports, memorandums, letters and technical reports to applicants on required systems, processes, code provisions to ensure compliance and /or operational functionality of fire, suppression and/or life safety systems. Manage time and meet deadlines.
- Provide code and standard references, as well as document research, reports, and interpretations for fire protection applications.
- As needed, perform field investigations at in-progress construction sites verify accuracy of design and perform/witness acceptance testing/commissioning; verify full compliance with life safety and building code requirements.
- Assists Fire Marshal's Office staff training and may assist fire inspectors on difficult or unusual code requirements.
- Informs and/or promptly communicates with VFD chain of command of significant projects, issues and concerns pertaining to pending submittals.
- Perform other duties and responsibilities as assigned.

#### Qualifications

##### Experience and Education

- Five (5) years engineering/consulting experience in fire protection related engineering field OR Seven (7) years of work experience in the design or review of fire protection. A Professional Engineering (P.E.) license or an engineer-in-training (E.I.T.) certificate may be considered in lieu of some work experience.
- Bachelor's degree (B.S.) in Engineering from accredited college or university in Fire Protection Engineering, Fire Sciences, or related Engineering field

*Equivalent combinations of education and experience may be considered.*

##### Computer Skills

- Intermediate level skills using Infor and ProjectDox
- Intermediate level skills with MS Office, MS Project software

##### Required Licenses and/or Certifications

##### Possession of:

- Valid Driver's License

#### Ability to obtain:

- International Code Council certification as a Fire Plans Examiner or the ability to obtain this certification within 12 months after hire and International Code Council certification as a Building Plans Examiner or the ability to obtain this certification within 12 months after hire
- OR Professional Engineer license
- OR Engineer in Training (EIT) certificate qualifications with Professional Engineer license within 24 months of hire

#### Knowledge

- Fire protection engineering principles
- Sprinkler systems, experience in design, inspection, or testing of fire suppression systems; fire alarm and detection systems, and/or passive fire protection systems
- Principles of fire prevention and safety education, including effective teaching and presentation techniques
- Strong and effective spoken and written (English) communication skills, including the ability to prepare and present clear and concise technical reports, investigative findings, correspondence, etc.
- Fire hazards and the related prevention and abatement methods
- Firefighting techniques, incident command system, and fire suppression equipment
- Principles of fire behavior
- Fire prevention inspection principles, methods and techniques
- State laws and local ordinances pertaining to fire code inspections, plans review and acceptance testing of fire protection appliances and/or equipment, the International Fire Code, International Building Code and applicable national standards with fire prevention
- Safe work practices and procedures
- Public relations as they relate to obtaining cooperation and compliance to fire codes and laws
- Modern office procedures, methods and computer equipment.
- Pertinent federal, state and local laws

#### Abilities

- Ability to effectively read and interpret architectural drawings, plans, specifications and site plans quickly and accurately, compare them to construction in process and perform building plan reviews
- Work with multidisciplinary teams on projects, working particularly closely with fire staff, building plans examiners, engineers, and architects.
- Conduct and document assigned work such as basic building code analyses, egress analyses, fire detection and alarm systems reviews, smoke control systems reviews, and basic sprinkler and water supply systems reviews, including hydraulic calculations.
- Evaluate and apply Fire Code requirements to hazardous material safety data sheets, hazardous material control areas / uses.

- Apply engineering calculations such as size required, means of egress, maximum allowable building area, sprinkler system water supplies and smoke control equipment.
- Ability to evaluate and make recommendations regarding proposed alternate materials and methods and/or new technology as fire code equivalencies.
- Ability to develop and maintain effective working relationships demonstrating tact and diplomacy in all situations with co-workers, contractors, other business professionals and the public.
- Operate a personal computer and appropriate software.
- Work in a manner consistent with the City of Vancouver's Operating Principles.
- Work and act as a team player in all interactions with other City employees.
- Provide a high level of customer service at all times.
- Project and maintain a positive image with those contacted in the course of work.
- Develop and maintain collaborative and respectful working relationships with team members and others.
- Consistently provide quality service.
- Maintain regular and dependable attendance.

Important dates:

March 14-April 14, 2023 – Application period

April 25 – April 26, 2023 – Phone screen

May 2, 2023 – Panel interviews

This position is subject to successful completion of a pre-employment reference check, a basic criminal background check, a driving abstract, and a medical evaluation.

[Job Posting End Date](#)

April 14, 2023

## **City of Vancouver – Application Process**

[Careers with the City of Vancouver | City of Vancouver, Washington, USA](#)