



**City of Tigard  
Public Works Department**

**PRINCIPAL ENGINEER  
Job Classification**

**DEFINITION**

Under general direction, plans, organizes, oversees, coordinates, and reviews the work of professional and technical staff; confers with developers, contractors, and representatives of other agencies regarding facility and infrastructure development; administers professional services and construction contracts; provides complex assistance to department management in areas of expertise; performs a variety of studies and prepares and presents staff reports; and performs related work as required.

**SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from the City Engineer or assigned supervisory or management personnel. Exercises direct and general supervision over professional and technical staff.

**CLASSIFICATION CHARACTERISTICS**

This is the full supervisory-level class in the professional engineering series. Incumbents are responsible for planning, organizing, supervising, reviewing, and evaluating the work of engineering staff. Incumbents are also expected to independently perform the full range of engineering duties. Performance of the work requires the use of considerable independence, initiative, and discretion within established guidelines. This class is distinguished from the assigned manager in that the latter has management responsibility for all and/or public works-specific engineering programs and functions and activities of the City.

**ESSENTIAL JOB FUNCTIONS**

- Plans, organizes, assigns, supervises, and reviews the work of assigned staff; evaluates employee performance, counsels employees, and effectively recommends initial disciplinary action; assists in selection and promotion; trains staff in work procedures; implements procedures and standards.
- Monitors operations and activities of the assigned engineering function; recommends improvements and modifications and prepares various reports on operations and activities; recommends and assists in the implementation of goals and objectives; implements policies and procedures.
- Determines and recommends staffing needs for assigned area; participates in the annual budget preparation; prepares detailed cost estimates with appropriate justifications, as required; maintains a variety of records and prepares routine reports of work performance.
- Supervises, plans, designs, and inspects all phases of civil engineering public works construction projects, including defining the scope of the project; securing adequate funding from Federal and State grant programs and other funding sources; coordinating with permitting and public utility agencies; performing historical document research and review; surveying and engineering analysis of alternatives; preparing plans, specifications, and cost estimates; performing research, map, and field studies and surveys; drafting site plans with specialized computer software; applying engineering principles and practices to specific problems; coordinating construction schedules with other projects and agencies, preparing and reviewing cost estimates and inspecting construction of projects to ensure compliance with construction documents; and other related engineering and design work.

- Meets with developers and planners concerning future private development in the City; explains City's engineering requirements, compliance review process, plans approval, and signature to plats.
- Reviews compliance criteria for the design and construction of streets, sidewalks, public utilities; reviews specifications, analyzes engineer estimates, issues permits for work in public right-of-way or easements, and assures adequate development performance guarantees are provided.
- Reviews and approves plans and specifications; prepares correspondence; provides engineering assistance to other City departments and government agencies as needed.
- Represents private development issues to Council, Planning Commission, and other boards and committees as needed.
- Attends meetings, conferences, workshops, and training sessions and reviews publications and audio-visual materials to become and remain current on principles, practices, and new developments in assigned work areas.
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities.
- Performs other duties as assigned.

#### **Job and Conduct Requirements:**

- Performs quality work within deadlines with or without direct supervision.
- Works independently while understanding the necessity for communicating and coordinating work efforts with other employees and organizations.
- Maintains regular job attendance and adherence to working hours, consistent with applicable policies.
- Complies with applicable city, state, local, and federal laws, rules, and regulations; follows and maintains knowledge of all City policies and procedures.
- Observes safe work methods; reports safety, sanitary, and fire hazards immediately to supervisor and follows prescribed policies for safety.
- Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions.
- Participates effectively at regular team meetings using appropriate interpersonal skills and problem-solving skills and conflict resolution strategies.
- Maintains appropriate certifications and training, as required.
- Interacts thoughtfully and courteously with staff and community; acts and resolves conflict in a professional manner.
- Works effectively as a team contributor on all assignments.

### **JOB QUALIFICATIONS**

#### **Knowledge of:**

- Principles and practices of employee supervision, including work planning, assignment, review and evaluation, discipline, and the training of staff in work procedures.
- Civil engineering principles, standards, techniques, policies, and procedures.

- Methods, materials, and techniques used in the construction of public works projects, including water and wastewater systems, stormwater, street, and traffic systems design.
- General design, layout, and construction practices for public improvements such as streets, storm drains, grading, and landscaping.
- Subdivision engineering, plan review, permit filing and approval, mapping, and construction practices.
- City's CIP, Community Development Code, Engineering Standards, Comprehensive Plan, Facility Master Plan, Transportation System Plan, and other adopted plans.
- Applicable federal, state, and local laws, codes, and regulations.
- Techniques for dealing effectively with the public, vendors, contractors, and City staff, in person and over the telephone.

**Skill in:**

- Use of personal computers, various related software programs, and standard office equipment used by the City including computer-aided drafting applications, Geographic Information Systems (GIS) programs, word processing, spreadsheet, and presentation applications.
- Oral and written communication skills to understand written information (including instructions, descriptions, and ideas), and to express complex information verbally and in writing so that others will understand and, at times, be convinced or persuaded.
- Active listening skills and interpersonal skills.
- Conflict resolution skills.
- Organizational and time management skills to organize own work, set priorities, and meet critical time deadlines.

**Ability to:**

- Assist in developing and implementing goals, objectives, practices, policies, procedures, and work standards.
- Supervise, train, plan, organize, schedule, assign, review, and evaluate the work of staff.
- Conduct complex civil engineering research projects, analyze complex problems, evaluate alternatives, make sound recommendations, and prepare effective technical staff reports.
- Prepare, understand, and interpret engineering construction plans, specifications, and other contract documents.
- Read, interpret, apply, and explain technical written material and complex laws, codes, regulations, ordinances, and City engineering policies and procedures.
- Effectively represent the department and the City in meetings with governmental agencies, community groups, and various business, professional, and regulatory organizations and individuals.
- Coordinate assigned activities with other City departments and agencies as required.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, and other written materials.
- Make sound, independent decisions within established policy and procedural guidelines.
- Comprehend and use English effectively including producing all forms of communication in a clear, concise, and understandable manner to intended audiences.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

## **MINIMUM QUALIFICATIONS**

### **Minimum Education/Experience Requirements:**

Any combination of training and experience, which would provide the required knowledge, skills and abilities, to perform the essential functions of the position, may be qualifying. A typical way to obtain the required qualifications would be:

- Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering or related engineering field; **and**
- A minimum of five (5) years' increasingly responsible experience in professional engineering design, plan review, and project administration including at least one (1) year of lead or supervisory experience; **or**
- Any satisfactory equivalent combination of education, training, or experience relevant to the position.

### **License and Certification Requirements:**

- Possession of a valid driver's license and satisfactory driving history.
- Possession of, or ability to obtain within six (6) months of appointment, a Registration as a Professional Civil Engineer license to practice in the State of Oregon.

## **WORKING CONDITIONS**

### **Work Environment:**

Employees work in an office environment with moderate noise levels and controlled temperature conditions; but may occasionally be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

### **Physical Demand/Manual Dexterity:**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle; and to visit and inspect various City development and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification, although the job involves field inspection work requiring frequent walking at inspection sites to monitor performance and to identify problems or hazards; standing in work areas and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard, typewriter keyboard, or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Management is receptive to receiving requests from employees for accommodations related to disability, will engage in the interactive process with employees who make such requests and, where accommodation is needed and reasonable, is committed to providing accommodation, unless doing so would impose an undue hardship on the operation of the business.

### *Revision History:*

*October 2016: Establish classification*