



## Essential Duties, Training and Experience, Knowledge and Skills

**Job Posting: Civil Engineer**

**Classification Specification: Technical Analyst**

**Department: Public Works**

### **Essential Duties:**

The Civil Engineer performs a wide range of professional engineering duties applying engineering principles and methods necessary for planning and construction of sanitary sewers, storm sewers, streets, and other Public Works improvement projects and public facilities; project planning and coordination. May provide lead responsibilities for assigned staff. Performs related duties as assigned.

*The duties listed below are a typical sample; position assignments may vary.*

- Performs analysis and evaluation pertinent to issues relevant to area of responsibility, which includes: researching; reviewing plans, permits, other specifications; data development and integration; determining and raising pertinent issues; designing and implementing solutions; summarizing findings.
- Designs and/or manages special studies and projects, which includes: publicizing projects; monitoring budget; establishing and monitoring timelines; ensuring compliance with applicable regulations, specifications, and/or requirements; preparing related reports; and performing other related duties.
- Maintains necessary records; reporting requirements; and/or systems.
- Prepares a variety of reports summarizing project, study, and program data; analyzes related data and makes recommendations based on findings.
- Leads development and integration efforts; designs and implements relevant solutions.
- Designs, implements, and maintains the performance of assigned databases.
- Ensures compliance with applicable Federal, State, and Local laws, rules, regulations, and policies.
- May provide lead direction in the form of technical and functional supervision for lower level staff.

# **Essential Duties, Training and Experience, Knowledge and Skills Continued:**

## **Essential Duties continued:**

- Actively supports an inclusive and respectful work environment.
- Performs other duties of a similar nature or level.

## **Training and Experience:**

Bachelors Degree in a related field; and sufficient experience as necessitated by the competency level of the position.

- In the field of Civil Engineering or a related field which provides the necessary education/training and/or experience to perform at a specific level.
- Contributing Level: 0-2 years of professional experience related to area of assignment.
- Journey Level: 2-5 years of progressively responsible professional experience related to area of assignment.
- Advanced/Lead Level: 5-8 years of progressively responsible professional experience related to area of assignment.
- Specialized knowledge specific to area of assignment may be required.

## **Licenses and Certifications:**

- Engineer-In-Training requires registration as an Engineer-in Training in the State of Oregon; or registration as an Engineer-in-Training in a reciprocal state and the ability to obtain Oregon registration within six (6) months of appointment.
- All levels above EIT require registration as a Professional Civil Engineer in the State of Oregon, or registration as a Professional Civil Engineer in a reciprocal state, and the ability to obtain Oregon registration within twelve (12) months of appointment.
- Based upon assignment, specified licenses and/or certifications may be required.
- Valid Oregon drivers license at time of appointment, depending on area of assignment.

## **Knowledge:**

- Pertinent state, local, and federal regulations and codes pertinent to area of assignment;
- Principles, practices, techniques of civil engineering, planning, construction and inspection pertinent to area of assignment;
- Principles and techniques of contract document preparation and contract administration;
- Engineering design specifications; construction means and methods;
- Project management concepts, methods and techniques;
- Applied mathematics essential to the field of engineering;
- Interpret and implement methods, practices, policies and procedures relevant to assigned area;

## **Essential Duties, Training and Experience, Knowledge and Skills Continued:**

### **Knowledge continued:**

- Computer applications and other systems related to assigned area;
- Resource allocation principles;
- Public relations principles;
- Modern office methods and practices;
- Project management principles;
- Research; data gathering and report writing techniques;
- Practical application of science and technology to area of responsibility;
- Principles, techniques, procedures, and equipment relevant to technical area;
- Applicable Federal, State, and local laws, rules, regulations, codes, and/or statutes;
- Inclusive and respectful work place practices.

### **Skills:**

- Applying civil engineering principles, practices and techniques;
- Interpreting and implementing pertinent policies, procedures, rules and requirements;
- Preparing documents related to contract administration;
- Monitoring construction projects; developing cost estimates and allocating resources;
- Reviewing and updating engineering design specifications and other pertinent documents;
- Developing and maintaining respectful and inclusive work relationships;
- Performing assigned duties in a safe manner;
- Managing projects; assigning and monitoring the work of others, as required;
- Conducting research; preparing reports;
- Use of mathematics and applicable scientific rules and methods to solve problems;
- Analyzing and identification of complex problems or needs; reviewing related information to develop and implement necessary systems, equipment, or other solutions;
- Interpreting and applying applicable laws, rules, regulations, standards, and guidelines;
- Demonstrating use of discretion and independent judgment;
- Using computers, databases, and related hardware and software applications to perform duties of position;
- Communication, interpersonal skills as applied to interaction with coworkers, management, the general public, etc. sufficient to exchange or convey information and to receive work direction; and to coordinate services with other agencies and departments;
- Working effectively with clients, co-workers, employees and supervisors from diverse backgrounds.