

Engineer II



DEPARTMENT: Public Works
DIVISION: Engineering
SUPERVISOR: Engineering Manager
CLASSIFICATION: Non-Exempt (overtime eligible)
UNION: Yes
CONFIDENTIAL: No

POSITION SUMMARY

Performs professional civil engineering work in design, review, planning, construction, and maintenance of public works projects, including street improvements, sanitary sewer, stormwater, water system improvements, and transportation systems. May serve as project manager on City engineering and construction projects.

SUPERVISION RECEIVED

Works under the direct supervision of the Engineering Manager.

SUPERVISION EXERCISED

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following, but are not limited to:

- Coordinates assigned projects, including planning, scheduling, and coordinating project engineering work, reviewing, and approving construction plans and supporting calculations, and ensuring project compliance with all codes and ordinances and established engineering standards.
- Performs moderately complex engineering work in connection with municipal public works projects, including simple to complex civil engineering design work, calculates construction quantities, and prepares engineering and construction estimates in coordination with the Engineering Manager or Engineer III including sanitary sewer, water, storm drainage, and street system maps, databases, and comprehensive plans. Plans, schedules, and coordinates work on engineering projects.
- Prepares design plans, specifications, and bid documents, holds bid conferences, evaluates bids, makes bid award recommendations, and reviews contractor pay requests.
- Participates in project budget administration, cost accounting, and scheduling.
- Develops construction plans and details, notes, and project specifications.
- Completes all necessary reports, charts, graphs, correspondence, maps, and reports.
- Coordinates with contractors, other departments and agencies, and other interested parties to solve construction difficulties and problems and adjusts original designs as needed.
- Keeps immediate supervisor and designated others accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems.
- Responds to citizens' questions and comments in a courteous and timely manner.

- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities.
- Coordinates required advertising for bids, reviews construction bids, and makes necessary recommendations based on lowest and best bids, competency of vendors and consultants, and the selection criteria.
- Provides project coordination for assigned engineering and construction of projects.
- Performs construction inspection of private development projects within the public right of way.
- Reviews a variety of construction plans, maps, reports, applications, and various development and construction agreements and makes recommendations on design procedures.
- Checks plans and specifications for accuracy and completeness of design. Prepares preliminary and final project cost estimates.
- Performs field engineering and inspection of all engineering and public works related projects and improvements.
- May perform field survey and construction inspection services.
- Assists in facilitating the definition of project scopes, goals, milestones, and deliverables. Defines project tasks and resource requirements. Plans and schedules project timelines. Identifies project risks and develops contingency plans. Prepares project cost estimates.
- Creates and maintains comprehensive project documentation. Conducts regular field inspections and site visits.
- Develops and evaluates plans, specifications, and criteria for a variety of projects and activities to be carried out by others. Reviews reports, plans, and specifications prepared by staff for compliance with engineering practices and City standards.
- Reviews plans related to structures such as streets, sidewalks, gutters, and other offsite construction; checks plans for conformance with regulations regarding line, grade, size, elevation, and location of structures; checks calculations.
- Maintains files relating to projects such as: improvement agreements, security documents, engineering plans, specifications related to developments, as built drawings, and program records.
- Performs other duties as assigned as it pertains to this job and the department/division.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE

- a. Bachelor's degree from a four-year college or university in civil engineering or a closely related field.
- b. Minimum of two to four years of engineering design experience with some project coordination responsibilities.
- c. Must possess Engineer in Training certification.
- d. Professional Engineering (PE) license in Civil Engineering from the State of Oregon is preferred, but not required.

KNOWLEDGE, SKILLS, AND ABILITIES

- a. Intermediate skill using AutoCAD Civil 3D software, including Civil 3D drafting including importing points, line work/drafting, generating, and modifying horizontal and vertical alignments, grading, performing earthwork calculations, generating and transferring points, and creating utility plan and profile construction drawings.
- b. Knowledge of civil engineering principles, practices, and methods as applicable to a municipal setting, including knowledge of applicable City policies, laws, and regulations affecting Division activities.
- c. Skilled in arriving at cost estimates for construction projects and in operating the listed tools and equipment.
- d. Interpersonal and communication skills necessary to tactfully enforce contractor's compliance with plans and specifications, while maintaining satisfactory relationships with contractors and their employees, as well as to interact tactfully and effectively with the general public.
- e. Ability to communicate effectively, orally and in writing, with employees, consultants, other governmental agency representatives, City officials and the general public; Ability to conduct necessary engineering research and compile comprehensive reports.
- f. Civil engineering applied to estimates, studies, technical reports, design, plans, specifications, and professional recommendations for a variety of engineering activities.
- g. Construction including survey, inspection and public works contract administration procedures, and engineering materials and methods.
- h. Public works contract administration including contract preparation, contractor selection, administration of contract work, change orders, disputes, claims, equal opportunity, and closing of contracts.
- i. Independently plan, perform, and coordinate advanced level professional and technical engineering studies, computations, drawings, reports, and surveys.
- j. Take coaching, instruction, and feedback with a cooperative and positive attitude.
- k. Equipment and materials used in street construction and maintenance.
- l. Design and drafting methods, software, and equipment.
- m. Data gathering, analysis, and research.
- n. Communication principles, practices, and techniques.
- o. Adapt to changing, intensive deadlines.
- p. Interpreting data or information.
- q. Performing highly detailed work.
- r. Use math and perform complex scientific and mathematical computations.
- s. Modern office practices and methods, computer equipment, and software applications.

SPECIAL REQUIREMENTS

- Must possess a valid state driver's license or ability to obtain prior to employment.
- Must be physically capable of moving about on construction work sites, climbing ladders, and safely negotiating sites under adverse field conditions.

TOOLS AND EQUIPMENT USED

Use of computer or laptop for use in word processing, spreadsheet, and data base and computer-aided-design software; standard drafting tools; surveying equipment including level, theodolite and electronic distance measuring devices; motor vehicle; phone; mobile radio.

PHYSICAL DEMANDS

The physical demands herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform these essential job functions.

- While performing the duties of this job, the employee is occasionally required to stand or sit; walk, use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee is occasionally required to climb or balance; stoop, kneel, crouch, or crawl; talk or hear. The employee must occasionally push, pull, lift and/or move up to 20 pounds.
- Vision sufficient to read small print, computer screens, and other printed documents. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth vision, depth perception, and the ability to adjust focus.
- Incumbents require sufficient mobility to work in an office setting and operate office equipment. Some outdoor work is required to inspect various developments and construction sites. Hand-eye coordination is necessary to operate computers and various pieces of office equipment.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Normal office setting with some travel for meetings or inspections. The noise level in the work environment is usually quiet in the office and moderate to very loud in the field.
- Position has normal business hours. Occasional attendance at evening meetings required.
- Adverse working conditions include exposure to seasonal weather changes including working in inclement weather.

EMPLOYEE ACKNOWLEDGMENT

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

I acknowledge that I have received a copy of the **Engineer II** job description. I understand that it is my responsibility to adhere to the Essential Duties and Responsibilities as outlined within this job description.

My signature below is evidence that I have reviewed and concurred that the above detailed job description appropriately describes the work of the position, including essential job functions, the minimum education and experience required of the position, and the physical demands of the position.

Signatures:

Engineer II

Date

Print Name: _____

Engineering Manager

Date