

CITY OF NEWBERG

POSITION DESCRIPTION

Class Title: **Engineering Technician 2**
Department: Public Works Department
Section: Engineering

Range Number: 148 (\$4,084-\$5,228)
Location: City Hall
Date: June 2014

GENERAL PURPOSE:

Performs highly technical work in support of engineering, environmental, development, and GIS functions for public works programs and community development programs. Work involves applying advanced scientific and technical knowledge to projects and assignments. Office work involves data maintenance, analysis or computations aided by computers, technical research and review and may involve frequent public contact. Field work may include on-site information gathering, monitoring, and inspection of projects or existing public facilities and interaction with private contractors and the public.

SUPERVISION RECEIVED:

Works under the general guidance and direction of the Senior Engineer, Civil Engineer 2, and/or City Engineer.

SUPERVISION EXERCISED:

None

DISTINGUISHING CHARACTERISTICS:

This class is distinguished from the Engineering Technician 1 class by greater responsibility, independence and complexity of assignments. Engineering Technician 2's perform work at journey level and are assigned responsibility for projects and assignments of a larger scope or varied portions of larger projects. It is distinguished from the Engineering Technician 3 class in that employees in this class perform work under closer supervision, and carry out assignments that are less technically difficult.

ESSENTIAL DUTIES AND RESPONSIBILITIES: *(Any one position may not include all of the duties listed nor do the listed examples include all tasks which may be found in positions of this class.)*

Performs a variety of drafting and design assignments using manual and computerized methods; prepares drawings for engineering projects under preliminary design, design and as-built mapping; creates and updates drawings, maps, graphs and charts for engineering uses.

Inspects sidewalk and driveway approach construction to ensure quality of work and conformance to specifications.

Performs field work for data collection for engineering, environmental, development, and/or GIS studies.

Prepares reports to describe project or program goals or activities using manual or computer tools.

Assists, as assigned, in the various phases of project design; researches records; reviews legal descriptions for accuracy.

Explains City codes, policies, procedures and other regulations to members of the public, contractors, engineers, architects and other public or utility organization employees to ensure adherence to procedures in routine technical matters. Reviews and issues permits.

Provides office design support and field engineering support for environmental, water, sewer, storm, street, and other public works projects and programs, ensuring technical competence and compliance with all current codes and criteria.

Maintains observation reports, files, plans, plats, maps, project status reports, as-built records, etc.

Interacts with vendors, as appropriate, related to City projects.

Reviews private project development plans for compliance with codes, regulations, and standards, adequacy of applications for permits and compliance with approved plans. Conducts site inspections.

Prepares and documents budget requests. Prepares project cost estimates.

Lays out and conducts surveys for sanitary sewer, storm water, or water system projects, easements and other engineering activities; operates a variety of survey equipment; performs survey computations.

Reviews and prepares technical documents such as Agreements, Deeds, and Easements and coordinates review by City Attorney.

Conducts traffic studies including set-up, run analysis and write reports.

Assists other departments with field engineering support and report writing.

Under direction, performs intermediate level tasks associated with updating layers of the Geographic Information System (GIS). May perform some field work necessary for data collection.

Critically reviews staff and consultants' reports. Investigates utility problems; makes on-site inspections; performs necessary analyses (and/or reviews analyses of others) to define final corrective actions.

May attend Design Review meetings on behalf of Engineering Division. Gives input on potential private developments and their impact to City Infrastructure.

Develops and maintains a pavement management system.

Under direction of a Civil Engineer, designs a variety of engineering projects, including streets, water, storm water and sanitary sewer system improvements, parking lots and other capital improvement projects ensuring technical competence and compliance with all current codes and criteria.

Prepares correspondence and reports, researches and compiles contract documents, contracts, bid reviews, and provides preliminary bid analysis for contract awards.

Performs other duties as assigned.

PERIPHERAL DUTIES:

Coordinates sidewalk/approach inspection, maintenance and enforcement programs.

Monitors inter-governmental actions affecting public works.

Assists in the training of other city personnel in public works design and construction techniques.

DESIRED MINIMUM QUALIFICATIONS:

Education and Experience:

Any equivalent combination of education and experience which provides the applicant with the knowledge, skills, and abilities required to perform the job. A typical way to obtain the knowledge and abilities would be:

Graduation from high school or GED and three years progressively responsible varied technical engineering related work, including the use of AutoCAD Civil 3D and municipal construction inspection/observation.

Knowledge of:

Principles, practices, terminology, techniques and instruments related to area of assignment.

The use of computers and applicable computer applications for design/drafting (AutoCAD Civil 3D), quantity calculations, mapping (Arc GIS), locating, record keeping and other engineering purposes.

Standard office practices and procedures for maintaining and setting up manual and electronic files.

Legal requirements, codes and compliance issues related to area of assignment.

Introduction to management principles and practices in administration, planning and organization of projects.

Ability to:

Perform skilled civil drafting, surveying and related computations.

Observe and inspect capital project and private development construction for compliance with plans and specifications

Prepare clear and concise records, reports and files.

Gather and correlate data from a variety of sources.

Establish and maintain effective working relationships with other employees and the public.

Communicate effectively, both orally and in writing.

Review documents for accuracy and obtain information from technical documents.

Use applicable computer applications effectively in support of functional area.

Read and interpret technical materials such as engineering plans and specifications, maps, computer manuals, code provisions, state and federal regulations and guidelines.

Design engineering projects using AutoCAD Civil 3D.

Operate other listed tools.

LICENSES, CERTIFICATES, AND OTHER REQUIREMENTS:

Must possess a valid State of Oregon driver's license or have the ability to obtain one prior to employment.

Must be physically capable of moving about on construction work sites and under adverse field conditions.

TOOLS AND EQUIPMENT USED:

Personal computer, including word processing, spreadsheet, and data base and computer-aided-design software; standard drafting tools; surveying equipment including level, theodolite, GPS, and electronic distance measuring devices; motor vehicle; phone; mobile radio.

PHYSICAL DEMANDS:

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. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Work is performed mostly in office settings. Some outdoor work is required in the inspection of various land use developments, construction sites, or public works facilities. Hand-eye coordination is necessary to operate drafting instruments, computers and various pieces of office equipment.

While performing the duties of this job, the employee is occasionally required to stand; 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 sit; climb or balance; stoop, kneel, crouch, or crawl; talk or hear; and smell.

The employee must occasionally lift and/or move up to fifty (50) pounds.

Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

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.

While performing the duties of this job, the employee often works in outside weather conditions. The employee often works near moving mechanical parts and in high, precarious places and is occasionally exposed to wet and/or humid conditions, fumes or airborne particles, toxic or caustic chemicals, risk of electrical shock, and vibration.

The noise level in the work environment is usually quiet to moderate.

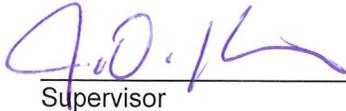
SELECTION GUIDELINES:

Formal application, rating of education and experience; oral interview; written exercise; reference check; written exercise; and criminal history background check. Job-related tests may be required.

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.

APPROVAL



Supervisor



Appointing Authority

Effective Date: June 2014