CITY OF PULLMAN, WASHINGTON
CLASS SPECIFICATION

INSTRUMENTATION AND CONTROL TECHNICIAN 2206

GENERAL PURPOSE:
Maintains, repairs, replaces, diagnoses, and installs a wide variety of municipal electronic equipment including traffic control, radio, and leased line communication networks; processes control and instrumentation, telecommunications equipment and circuits, and the computer components of those systems for the water, sewer, street, storm water, and wastewater treatment divisions.

CLASSIFICATION SUMMARY:
The principal function of an employee in this classification is to inspect and maintain municipal electronic equipment. The work is performed under the direct supervision of the Maintenance and Operations Superintendent. Work is evaluated for timely and efficient completion of tasks. This position may occasionally supervise seasonal or casual employees.

ILLUSTRATIVE EXAMPLES OF ESSENTIAL DUTIES AND RESPONSIBILITIES:
Inspects, troubleshoots, diagnoses, calibrates, repairs, maintains and installs municipal electronic equipment of a wide variety and varying complexity including remote pump control systems, electronic switching gear, telemetering systems, system measurement equipment, computerized traffic control devices, flow metering equipment, and electronic security systems

Designs, installs, and maintains control circuits for motors and control valves in accordance with state and national codes and standards. Develops electrical standards for equipment and installations.

Calibrates and checks instrument loops. Performs instrumentation startups

Performs administrative tasks, such as preparing specifications, purchasing, specifying and inventory control.

Prepares cost estimates for jobs.

Makes recommendations for updating existing equipment.

Assists the Maintenance and Operations Superintendent with budget estimates and justifications.

Creates and maintains documentation, manuals, and records in printed and electronic format.

Tracks work completed using the City's computer based work order program.

Installs and maintains radio and telephone equipment for Supervisory Control and Data Acquisition (SCADA), including masts and antenna supports

Reviews and corrects consultants' plans and specifications for process control, instrumentation and electrical systems.

Inspects work done by others and instructs others on use of equipment.

Conducts operational and electrical safety training for operations personnel.

Occasional after hours assistance and emergency call-outs are required.

Attends work on a regular and dependable basis.

Interacts in a professional and respectful manner with city staff and the public.

OTHER JOB FUNCTIONS:
Perform other related duties and responsibilities as required.

SELECTION FACTORS:
(Applicants should describe their previous experience and training for each of the following selection factors. These factors will be the basis for selecting the most qualified applicants to be interviewed. Candidates selected for employment must satisfactorily demonstrate possession of these factors during a prescribed probationary period, and afterwards, for continued employment.)

Knowledge of:
- Considerable knowledge of the principles, practices, methods, materials, equipment, tools and procedures involved in the maintenance, repair, installation, troubleshooting, calibration, and diagnosis of electrical and electronic systems and equipment suchs as telemetering instrumentation and control systems, computerized traffic control system, etc.
- Knowledge of safety procedures and ability to perform work in a safe and efficient manner.

Ability to:
- Ability to perform a wide variety of electronic troubleshooting, diagnosis and repair work from manufacturer theory of operation and schematics.
- Ability to read and interpret plans, specifications, design drawings and schematics for electrical and electronic systems.
- Ability to understand and follow oral and written instructions.
- Ability to use all standard tools and test instruments used in electronic repair work.
- Ability to work independently with minimal supervision;

MINIMUM QUALIFICATIONS:
(Persons applying for a position of this class should have any combination of the following experience and training.)

A high school education or GED plus graduation from a recognized electronics trade school plus two to five years experience in electronics. Electrical experience desireable. Must possess a valid driver's license and a good driving record.

TOOLS AND EQUIPMENT USED:

Standard electrical and electronic test equipment such as voltmeters, ohmmeters, ammeters, loop simulators, oscilloscopes, signal generators, transistor testers and wire identification systems.

Standard electrical hand tools including , but not limited too, screwdrivers, wire crimpers wire stripers, assorted pliers, and other common hand tools.

Personal computer – Microsoft Office products, Autodesk AutoCad Lite and specialized programs including Seimens Step 7, Seimens PLC Simulator, Seimens WinCC Flexible, Seimen Sinaut Network Configuration Software, Maintenance Connection Maintenance Software and various manufacture based software programs used for troubleshooting and calibration of electronic equipment.

Operation of motorized vehicles including a bucket truck.

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.)

This position involves working outdoors in all types of weather conditions, working at heights, working in confined spaces and working in hazardous/classified areas. To perform the essential functions of the job, incumbents must be able to perform the following: Climbing, balancing, stooping, kneeling, crouching, crawling, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, hearing/listening, seeing/observing, repetitive motions. Incumbents must be capable of exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

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.

FLSA: Non-Exempt ADOPTED: 12/07