

**CITY OF POMPANO BEACH  
CLASS DESCRIPTION**

**JOB CODE 467**

**INSTRUMENTATION TECHNICIAN**

**GENERAL**

The purpose of this classification, under general supervision, is to perform skilled work on various types of electronic equipment, related devices in the control, monitoring and recording of plant system functions, to include SCADA systems for water and reuse treatment plants and lift stations, as used in the Water and Wastewater Divisions. Performs skilled electrical work on industrial equipment including PLC's, VFD's, and soft starts. Performs related work as required. Reports to Utilities Maintenance Supervisor and fills in for that position in their absence.

**EXAMPLES OF ESSENTIAL DUTIES**

*The examples as listed are descriptions of essential functions and are not necessarily all inclusive. The omission of an essential function of work does not preclude management from assigning duties not listed herein. Assigned duties, which are essential function of work not listed herein, are permissible if such functions are a logical assignment to the position.*

- Installs, troubleshoots, repairs and makes necessary calibrations to electrical and mechanical instruments, electrical control and monitoring systems (facility telemetry and Plants' SCADA), sampling and recording equipment utilized in the water and wastewater utility industry.
- Performs these tasks for the water treatment and reuse plants, in the distribution system, at sewage pumping stations and on the work bench.
- Keeps repair and preventative maintenance records on all test equipment and sampling equipment used by the divisions.
- Uses electronic test equipment and calibration equipment on both energized and de-energized electrical circuits.
- Performs maintenance on plant master control consoles (MCCs), auxiliary engines, transfer switches and generators.
- Responsible for maintaining flowmeters, pH meters, chlorine meters, portable ultrasonic flowmeters, volt/ohm meters, ammeters, electronic transducers, chart recorders of various types, portable volt/amp recorders, capacitance meters, ground resistance meters, megohm meters, and a variety of other meters used in the treatment, sampling, and maintenance at water and wastewater facilities.
- Responsible for the calibration and maintenance of metering equipment both fixed and portable.
- Assists Utilities Supervisors, Electrician and maintenance staff with related duties including inventory, record keeping and purchasing of instrumentation devices, facilities telemetry systems and components, control panels and other related electrical, electronic and mechanical equipment.
- Performs other related duties as required.

## **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of electrical, mechanical and pneumatic control systems.
- Knowledge of Programmable Logic Controls (PLCs).
- Knowledge of analog and digital monitoring and control circuitry.
- Knowledge of occupational hazards and proper safety precautions applicable to working with electrical circuitry and mechanical apparatus.
- Ability to maintain, calibrate and work in fine detail the electronic, electrical and mechanical aspects of this equipment.
- Skilled in the use of associated electronic test equipment and computers.
- Have knowledge of or the ability to learn existing Computerized Maintenance and SCADA operating software and programs.
- Proficient in reading drawings and plans.
- Ability to read and draw one line diagrams and schematic of electrical and electronic circuits.
- Ability to plan, organize, and independently perform job assignments.
- Ability to adhere to prescribed routines and procedures.
- Ability to track and post data or other record keeping information either by written notations and/or entering such information into micro-computer or remote computer terminal (CRT) database systems.
- Ability to serve the public and fellow employees with honesty and integrity in full accord with the letter and spirit of all city ethics and conflicts of interest policies.
- Ability to establish and maintain effective working relationships with the general public, co-workers, city officials and members of diverse cultural and linguistic backgrounds regardless of race, religion, age, sex, disability or political affiliation.
- Ability to maintain regular and punctual attendance
- A strong understanding of ethical behavior is required.
- Ability to make independent decisions.

## **MINIMUM QUALIFICATIONS**

- Graduate of an accredited high school or possess an acceptable equivalency diploma.
- Have a minimum of three (3) years job experience in instrumentation and electrical control system maintenance, installation and repair.
- Must have completed certified training in an instrumentation program at an accredited technical or trade school.
- Must have a valid driver's license and be able to secure a valid Florida driver's license at the time of employment.
- A comparable amount of related training and experience may be substituted for the minimum qualifications.

## **PHYSICAL REQUIREMENTS**

- Must have the use of sensory skills in order to effectively communicate and interact with other employees and the public through the use of the telephone and personal contact as normally defined by the ability to see, read, talk, hear, handle or feel objects and controls.
- Ability to see color and have shade perception to be able to troubleshoot circuits that are colored coded.
- Ability and agility to perform various job duties in all weather conditions including lifting and/or interacting with job related appurtenances and equipment which might weigh in excess of seventy-five (75) pounds.
- Ability to perform tasks that require eye and hand coordination.
- Ability to see, ambulate independently, drive, climb, bend, stoop, sit, and stand.

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

11/2018

**Bargaining Unit:** Bargaining

**FLSA:** Non-Exempt

**Pay Grade/Group:** 26/42

**Location:** Utilities Department

**GERS: Regular:** Regular Class