



Marion County Board of County Commissioners

POSITION DESCRIPTION

To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

UTILITIES INSTRUMENTATION TECHNICIAN

Department: Utilities
Pay Grade: 110
FLSA Status: Non-Exempt
Job Class: 7134
Risk Code: 9410

JOB SUMMARY

Responsible for performing highly skilled technical work in the installation, modification, maintenance and repair of motor controls, instrumentation, telemetry, Lift Station controls, and other control systems and for calibration of instruments at Water and Wastewater Treatment and Collection systems.

ESSENTIAL JOB FUNCTIONS

- Performs maintenance and calibration checks and makes the necessary adjustments on process analytical instruments including but not limited to Ph, Turbidity, Chlorine Residual, Conductivity, ORP-Oxidation reduction potential, and DO-Dissolved Oxygen.
- Performs maintenance, repair, and modifications of radio telemetry equipment at all lift stations, wells, irrigation control, and monitoring sites and other telemetry sites. Installs and maintains pressure devices on waterlines throughout the system.
- Re-calibrates flow meters and readjusts as necessary by comparison method using NIST certified test flow meter. Maintains flow meter calibration plan for DEP submittal.
- Requests quotations for purchases on new instruments and make purchase requisitions.
- Requests POs for suppliers for items to repair, evaluate, and calibrate and packages and posts items. Makes certain that an adequate stock of spares is available and maintained for plant operations and unexpected failures.
- Interfaces with operators, supervisors, engineers, and upper management on repairs and special projects.
- Provides a liaison between suppliers, contractors, and Marion County personnel to ensure mission success.
- Analyzes system performance to determine the most effective, cost-efficient solution or improvement.

- Supplies plant operators and supervisors with accurate information regarding instrumentation performance to ensure daily operation is as efficient as possible.
- Utilizes Calibration software to record plant instrumentation, operation parameters, track calibration due dates, calibration and maintenance requirements and procedures, history records, and tracking of problems encountered. Prepares and distributes instruments calibration reports for each plant for submittal to DEP.
- Oversees the installation and troubleshooting of software necessary to drive and interface with various instrumentation. Performs some changes to SCADA HMI operator interface. Builds screens for new lift stations or other equipment being added to the system.
- Responds to emergency calls resulting from unexpected failure to plant or remote equipment due to lightning or other damages and contractor errors.
- Works a rotating twenty-four (24) hour, seven (7) day on-call shift for emergency coverage.
- Troubleshoots, repairs, and downloads application programs to Wells, Re-use controls, Lift Stations, and other RTU systems.
- Installs and works on Ultrasonic Level control systems.
- Troubleshoots PLC's control circuitry and repairs as necessary.
- Maintains accurate records of labor and materials.
- Works with Electrical and Lift station crew personnel to provide assistance in diagnosing and solving control wiring problems.
- Utilizes test equipment such as multi-meter, signal loop calibrator, frequency generators, oscilloscope, and others to diagnose problems and perform repairs to instrument devices and control devices as necessary.
- Provides excellent customer service to members of the general public and other County employees. Personal contact occurs with other employees of the unit, employees of other departments in the County, citizens, and customers of the department. Service is provided in person or by phone contact.
- Implements the organization's guiding principles and core values.
- Performs other related job duties as assigned.

SUPERVISION

This position has no supervisory responsibilities.

QUALIFICATIONS

Education and Experience:

High school diploma or equivalent; and four (4) years' experience in the installation, repair, troubleshooting, and maintenance of automation controls, including two (2) years' experience with telemetry or PLC systems and one (1) year experience with SCADA system software; or an equivalent combination of education and experience.

Licenses or Certifications:

Possession of a valid, State of Florida driver's license to operate a motor vehicle. Requirement exists at the time of hire and as a condition of continued employment.

Knowledge, Skills, and Abilities:

Language Skills

- Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures, or governmental regulations.
- Ability to write reports, business correspondence, and procedure manuals.
- Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

Mathematical Skills

- Ability to work with mathematical concepts such as probability and statistical inference and fundamentals of plane and solid geometry and trigonometry.
- Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Problem-Solving Ability

- Ability to define problems, collect data, establish facts, and draw valid conclusions.
- Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.
- Ability to assist in developing plans, policies, specifications, and programs continually.
- Ability to function independently as an expert in matters of specialized code, rules, policy, analyses, and complex scientific or technical systems.

Specialized Skills and Abilities

- Extensive knowledge of industrial and commercial electric, electronics, and PLCs.
- Knowledge of 4-20MA, 0-5vdc analog controls and equipment and be able to calibrate.
- Knowledge of and understanding of National Electrical Code.
- Knowledge of SCADA, VFDs, soft starts, pump controllers, and similar equipment.
- Ability to service 480-, 240-, and 120-volt electrical systems 24-volt AC, DC, and transformers.
- Ability to read electrical schematics and drawings.
- Able to adjust to ever-changing priorities.
- Ability to work effectively with co-workers and the general public.
- Ability to communicate with vendors and contractors.
- Ability to remain calm in stressful situations.
- Ability to take a teamwork approach to the job by cooperating with others, offering to help others when needed, and considering larger organization or team goals rather than individual concerns. Includes the ability to build a constructive team spirit where team members are committed to the goals and objectives of the team.

PHYSICAL DEMANDS

The work is medium work which requires exerting up to 50 pounds of force occasionally, and/or up to 30 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects. While performing the duties of this job, the employee will occasionally be required to sit, will regularly be required to walk, climb, or balance, stoop, kneel, crouch or crawl and taste or smell;

and will frequently be required to stand, use hand to finger, handle, feel, reach with hands and arms; talk and hear.

WORK ENVIRONMENT

Work is performed in various indoor and outdoor environments. While performing the duties of this job, the employee will occasionally be exposed to high precarious places, fumes or airborne particles, explosives, and vibration; will regularly be exposed to wet or humid conditions, moving mechanical parts, extreme heat, risk of electrical shock and risk of radiation; and will frequently be required to work in outdoor weather conditions.

Marion County has the right to revise this job description at any time. This description does not represent in any way a contract of employment.

Employee Signature

Date

Supervisor (or HR) Signature

Date

E.O.E. Marion County does not discriminate on the basis of race, color, national origin, sex, religion, age, disability or military service in employment or the provision of services.