Traffic Signal Technician 3

Category: Classified  
Pay Grade: C26  
Job Code: 16550

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.

JOB SUMMARY
Performs technical lead work in the installation, maintenance, and repair of computerized traffic signal systems and control equipment; leads, schedules, and directs traffic signalization projects or complex bench repair work and the inspection, maintenance, and repair of traffic signal systems and components and County drawbridges.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Provides lead work in the installation, maintenance, repair, troubleshooting, and modification of electrical and electro mechanical traffic signal devices and limited street lighting and prepares and submits as built construction drawings;
- Provides lead work in the design and modification of control and test devices for troubleshooting signal equipment, analyzes difficult circuit and interconnection problems with master controls, and makes repairs as needed;
- Provides lead work in performing complex bench work in the repair, rebuild, modification, and programming of electric, electronic, and electro-mechanical equipment, down to the component level;
- Inspects traffic signal construction for accuracy, completeness, and conformance to prescribed standards of quality and safety;
- Provides routine and emergency electrical and mechanical maintenance services for County drawbridge operations;
- May participate in emergency field repairs as required;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:
Four (4) years of electronics repair experience that includes two (2) years in traffic signal equipment; or completion of a two-year vocational or technical school program with a diploma or certification in a directly related field and two (2) years of traffic signal experience; or an equivalent combination of education, training, and/or experience.

Special Qualifications (May be required depending on area of assignment):
- Florida Driver's License or Florida Commercial Driver’s License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Possession and maintenance of an International Municipal Signal Association (IMSA) Level II Certification.
- Possession and Maintenance of an IMSA, Level III Certification if assigned to bench repair.
- Other knowledge, skills, abilities, and credentials required for a specific position.
Knowledge, Skills and Abilities:

- Knowledge of the principles and practices of electronics and electricity;
- Knowledge of methods, practices, techniques, materials, tools, and equipment pertinent to installation, maintenance, and repair of electronic and electro mechanical traffic signal systems and controls;
- Knowledge of the principles, practices, methods, materials, equipment, and tools used in the construction of traffic signal control intersections and installation of traffic signals, control equipment, electrical lines, and interconnect systems;
- Knowledge of occupational hazards and appropriate safety precautions.
- Skill in use of electronic, electrical, and electro mechanical testing devices, repair tools, and equipment.
- Ability to read, create, and work from plans and schematics and detect defects, make repairs, and perform maintenance on electronic, electrical, and electro mechanical devices and equipment;
- Ability to keep accurate records, prepare and submit clear and accurate reports, and plan and supervise the work of others;
- Ability to withstand exposure to varying weather conditions and work in confined spaces and at considerable heights, and possession of sufficient physical strength and agility to lift and carry heavy objects and stand and walk for long periods;
- Ability to use small office equipment, computers, and highly technical computer applications;
- Ability to use or repair small, medium, and heavy equipment and machinery;
- Ability to install telecommunications systems and computer hardware or network systems.

PHYSICAL/MENTAL DEMANDS

The work is heavy work which requires exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects. Additionally, the following physical abilities are required:

- Balancing: Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- Climbing: Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms. Body agility is emphasized.
- Crawling: Moving about on hands and knees or hands and feet.
- Crouching: Bending the body downward and forward by bending leg and spine.
- Feeling: Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
- Fingering: Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- Grasping: Applying pressure to an object with the fingers and palm.
- Handling: Picking, holding, or otherwise working, primarily with the whole hand.
- Kneeling: Bending legs at knee to come to a rest on knee or knees.
- Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
- Pulling: Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
- Pushing: Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
- Reaching: Extending hand(s) and arm(s) in any direction.
- Visual ability: sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
- Hearing ability: sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
- Speaking ability: sufficient to communicate effectively with other individuals in person and over a telephone.
- Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
- Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
• Repetitive Motion: Substantial movements (motions) of the wrist, hands, and/or fingers.
• Standing: Particularly for sustained periods of time.
• Stooping: Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
• Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

**WORKING CONDITIONS**

Work is performed in an environment with heavy equipment and machinery that could result in bodily harm to co-workers or others.