



Transportation Systems Technician 3

Category: Classified
Pay Grade: C28
Job Code: 16388

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 highly responsible advanced technical work that requires knowledge and skills implementing communications theory and principles to a highly complex transportation system; designs, analyzes, configures, and troubleshoots a complex communications network, core network switches, application servers, and workstations, field repairs, and maintenance of Intelligent Transportation System (ITS) devices and traffic control related equipment; ensures field and in-house ITS equipment and systems are properly functioning; analyzes network diagrams, sketches, blueprints, or schematics to document network design and relay information to subordinates and superiors; works closely with the County's Business Technology Services (BTS) staff on network configuration, development, and troubleshooting the ITS network; assists lower level technicians in network implementations, maintenance, and repairs; supervises lower level technicians.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Establishes and administers work plans as well as provides day-to-day supervision of lower level Transportation Systems Technicians in completion of their duties and evaluates performance;
- Designs, configures, deploys, and maintains ITS network equipment including field switches, video encoders, and other IP based network equipment;
- Troubleshoots and repairs traffic control center computer equipment, servers, ITS, and traffic-related software;
- Provides liaison work with BTS Department in design, troubleshooting, and repair of network core switch gear;
- Performs emergency and routine field servicing of Intelligent Transportation System devices including Closed Circuit Television Cameras (CCTV), Dynamic Message Signs (DMS), and vehicle detection equipment;
- Corresponds with consultants, vendors, equipment manufacturers, and software developers for design, integration, compatibility, and problem determination of ITS field and central computer equipment;
- Troubleshoots and repairs Ethernet network switches;
- Troubleshoots and maintains central video wall and video wall controller;
- Administers network controls including IP addressing, VPN access, subnet, and system user access;
- Reviews ATMS/ITS construction plans for network communications design criteria;
- Assists in future fiber allocations via planning meetings;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:

Five (5) years of experience performing hands on technical fiber-optic cable support activities maintaining and repairing electronic networking and telecommunication devices, electronic Intelligent Transportation Systems (ITS) devices support, or comparable equipment that includes lead worker, supervision, or supervisory training; or an Associate's degree in information technology or completion of two (2) years of vocational and information technology maintenance school training in a related field and two (2) years of experience as described above; 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.
- Employee to either obtain or complete training and become officially certified to terminate fiber optic cable.
- Employee must obtain and possess an International Municipal Signal Association (IMSA) Level II Signal Certification within 1 year of appointment.
- Certification in Cisco or other Network Certification Systems.
- Other knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:

- Knowledge of principals and procedures of communications operating systems, capabilities, characteristics and limitations of LAN, WAN, microcomputer systems, hardware and software, and mainframe servers;
- Knowledge of data communications methods and techniques relevant to ITS hardware and software;
- Knowledge of standard practices, materials, tools, and equipment used in fiber optic troubleshooting including Optical Time Domain Reflectometer (OTDR), light, and power meters;
- Knowledge of local and national electrical equipment codes, occupational hazards, and appropriate safety precautions;
- Knowledge of operating characteristics, capabilities, and limitations of computer equipment and routine procedures;
- Ability to apply computer applications and software;
- Ability to program network core switch gear parameters;
- Ability to create, update, and maintain network diagrams, schematics, and maps;
- Ability to locate, define, and repair defects in communication networks;
- Ability to relate technical information in a manner understandable to co-workers, superiors, other County departments, and members of the public;
- Ability to interpret and work from highly technical blueprints and schematics.

PHYSICAL/MENTAL DEMANDS

The work is light work which requires exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force 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.
- **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.
- Speaking ability: sufficient to communicate effectively with other individuals in person and over a telephone.
- 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 a dynamic environment that requires sensitivity to change and responsiveness to changing goals, priorities, and needs.