INTELLIGENT TRANSPORTATION SYSTEMS (ITS) COMMUNICATIONS SPECIALIST

JOB DESCRIPTION

Classification Responsibilities: An Intelligent Transportation Systems (ITS) Communications Specialist performs skilled technical work in the installation, maintenance, repair, modification, and testing of fiber optic and wireless communications equipment related accessories, CCTV cameras, and Dynamic Message Signs. Work is performed in accordance with departmental rules and regulations. This class is also responsible for performing related work as required.

Distinguishing Features: This class is supervised by the Signal Systems Supervisor who reviews work through meetings, reports, and observations of work in progress or upon completion. Employees in this class are subject to stand-by duty. This class is FLSA nonexempt.

QUALIFICATIONS

Minimum Qualification(s) Required. Any combination of training, education, and experience equivalent to graduation from an accredited college or university with an Associate's Degree in Electronics or related field. Considerable (3 - 5 years) experience in the installation and maintenance of communications systems. Must have basic knowledge of PC operations.

Special Requirement(s). Must possess a valid Arizona Driver's License by hire date. Must possess the following within one year of hire: 1) Certification in Fiber Optic Cable Splicing, Testing and Termination (from a continuing education provider, telecommunications carrier, or fiber optic cable supplier), and 2) International Municipal Signal Association (IMSA) Level II Traffic Signal Technician Certification. Within one year of hire, must possess the ETA Electronics Technician Association International RF Line Sweeping Certification.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualification(s). Fiber optic communications experience and IMSA Level III Traffic Signal Technician Certification preferred.

ESSENTIAL FUNCTIONS:

Communication: Communicates with management, vendors, contractors, and City employees to establish and maintain effective working relationships. Prepares written documents such as trouble logs, trouble call and maintenance documents with clearly organized thoughts and proper sentence structure, punctuation, and grammar in order to prepare written records, history and related maintenance and repair documentation.

Manual/Physical: Performs a variety of communications installation, maintenance, modification, troubleshooting, and repair work. Tests communication components using special testing equipment. Enters data into a personal computer (PC) to prepare schematic diagrams and drawings. Uses a PC to

manage assets, account for resources used, monitor communications, and evaluate performance of communications equipment. Performs physical inventories of electronic equipment. Distinguishes colors to identify color-specific indicator lights, wiring, and electronic components that use standard industry color codes. Assists construction inspectors on new construction contracts and installations that involve communication devices. Orders parts and accessories for maintenance of existing and new installations. Makes emergency repairs. Operates a vehicle such as a bucket truck and pickup truck requiring a standard Arizona Driver's License to travel to work sites to perform installation of equipment and testing of the traffic signal communications system. Operates various power drills, soldering equipment, splicing devices, and hand tools to install and repair communication equipment. Works at elevated level up to 60 feet in bucket or platform truck while performing duties. Works in small, cramped areas such as utility vaults, etc. Cleans electronic equipment and work areas. Meets scheduling and attendance requirements.

Mental: Diagnoses various equipment malfunctions. Develops specialized testing solutions. Conducts research and analyzes test measurements and other data. Resolves a variety of installation problems. Learns job-related material through on-the-job training, self-study, and in classroom settings. Performs mathematical calculations and electronic formulas. Comprehends and makes inferences from blueprints, equipment specifications, schematic drawings, and technical instructions regarding communications equipment and systems. Instructs, in either a classroom setting or in the field, other ITS staff and contractors in operations and maintenance of communication, CCTV cameras and dynamic message signs.

Knowledge/Skill/Abilities:

Knowledge of:

fiber optic testing and termination;
the use, calibration, and care of electronic test equipment;
the procedures used for installing and maintaining base and mobile equipment;
PC's for programming radios and Ethernet devices;
FCC rules and regulations concerning public safety radio systems;
principles of electrical, electronic, digital, and radio theory;
basic electronics;
National Electrical Code;
the technical and operating methods, tools, equipment, and materials used in testing, repair, construction, and maintenance work pertaining to communication systems;
computer networking and ability to set up and test modems; and
PC's including Windows, WinNT, and DOS.

Skill in the care and use of the tools and diagnostic equipment involved in installing and maintaining electronic and digital communications equipment and accessories.

Ability to:

diagnose and correct communications equipment malfunctions;
develop interfaces between equipment;

read engineering drawings and specifications;
install, splice, terminate, and test fiber optic cables;
operate electrical and optical equipment including: multimeters, oscilloscopes, bit error rate test sets, protocol analyzers, fusion splicer, polishing equipment, inspection microscope, light source, power meter, visual fault locator and optical time domain reflectometer (OTDR);
install and maintain CCTV cameras and dynamic message signs;
test electronic components with the use of special testing equipment;
install and relocate accessories and other equipment; and
maintain and troubleshoot vehicular mounted PC's, wireless data systems, and GPS/AVL systems.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised to Update Safety and Security 8/10
PG/dr

CS4752.DOC	PAY RANGE: 47
EEO-Tech	SH-02
NDOT SAFETY-Yes	SECURITY-No
NDOT RANDOM-No	
DOT SAFETY-No	CDL-No
RESP-No	IND-5506
JOB FCTN-TEC	SWORN-No
PAY STEPS-1-7	