

## TRAFFIC SIGNAL / PUMP STATION MAINTENANCE TECHNICIAN

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### **DEFINITION**

Under general supervision performs installation, maintenance and repairs to electronically sophisticated traffic control or pump station systems and to other electrical equipment and systems throughout City facilities. Performs other related work as required.

### **DISTINGUISHING FEATURES**

This is a journey level classification assigned primarily to either the traffic signal or pump station maintenance specialty, with both specialties providing cross training and cross coverage as needed. Incumbents are required to have a thorough knowledge of the maintenance and repair of either traffic signal and traffic controlling equipment or pump station and associated pump station monitoring equipment gained through formal education in electrical or electronic trade school, or from considerable and varied experience in working with the installation, maintenance and repair of electric and electronic traffic control devices or pump station equipment.

### **EXAMPLES OF DUTIES**

#### *Traffic Signal Maintenance Specialty:*

1. Maintains and repairs traffic signal systems including wiring, conduits, signal poles, controllers, electronic switching, equipment and vehicle detectors.
2. Makes continuous and detailed field checks to locate trouble or causes of failure; adjusts electronic detectors (i.e. vehicle actuated) and time controllers (i.e. fixed time); replaces signal lamps; checks fire preemptors and time clocks; cleans signal faces and reflectors; repairs faulty parts (i.e. modules and flashers).
3. Relocates traffic signal poles; repairs signal pole knock-downs.

#### *Pump Station Maintenance Specialty:*

1. Performs electrical maintenance, troubleshoots, and repairs wiring, conduits, SCADA and associated equipment on City pump stations or other city electrical mechanical systems.
2. Monitors City pump station operations and investigates reports of repairs needed; determines corrective action.
3. Makes preventive inspections for normal operation and makes necessary adjustments.

#### *Both specialties:*

4. Installs and maintains electrical and mechanical equipment in City facilities.
5. Troubleshoots electrical problems and failures in City facilities.
6. Operates and maintains electric and electronic measuring devices such as Volt-Ohm meters; operates welding equipment such as Arc and Oxy-Acetylene welders.
7. Drives and operates specialized vehicular equipment.
8. Prepares and maintains reports and records such as inventory records, damage reports and traffic signal maintenance records.
9. May provide lead direction and training for subordinate employees.

### **EMPLOYMENT STANDARDS**

#### **Education/Experience**

Any combination equivalent to education and experience likely to provide the required knowledge and abilities. A typical way to obtain the knowledge and abilities would be:

**Education:** Equivalent to graduation from high school supplemented by courses in electricity and electronics.

**Experience:** Progressively responsible experience either in the skilled maintenance and repair of solid state control systems and equipment OR in the skilled maintenance and repair of pump station equipment.

#### **Knowledge**

Knowledge of electrical and electronic theory; electrical equipment repair and maintenance; tools and equipment used in the repair and maintenance of electrical and electronic equipment; maintenance and repair techniques for traffic signal and control devices; maintenance and repair techniques for pump station equipment and safe work practices and procedures.

Ability

Ability to troubleshoot, install and repair electrical instrumentation, equipment, and systems; plan and complete work involving conduit and wiring in accordance with national standards; repair and test electronic equipment; operate heavy equipment, welding equipment and electric and electronic measuring devices; install and operate signalized computer systems; troubleshoot and repair microprocessor based control and communication equipment; diagnose electronic failures to the component level; work in high places; operate specialized vehicular equipment; interpret electrical codes and regulations; read and interpret blue prints, maps and drawings; maintain accurate records and prepare reports; communicate effectively; establish and maintain effective working relationships with employees and the general public; provide lead direction and training to subordinate employees.

Special Requirements

Willingness and ability to respond to after-hours emergency calls as required.

Other Requirements

*Traffic Signal Maintenance Specialty:* Possession of an International Municipal Signal Association (IMSA) Level II Certification for Signal Technician or the ability to obtain within six months of employment.

*Pump Station Maintenance Specialty:* Possession of Grade 1 California Water Environmental Association (CWEA) Electrical and Instrumentation Technologist (EIT) Certification or ability to obtain within 12 months of hire.

Possession of a valid Class B State of California Driver's License (or possession of a valid Class C license at the time of employment and the ability to obtain Class B within six months of employment) and a satisfactory driving record as conditions of initial and continued employment. Employees in positions requiring a Class B license are subject to provisions of the Department of Transportation's drug and alcohol testing program.