

City of Stockton

## TRAFFIC SIGNAL ELECTRICIAN

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|--------------------------|------------|
| Spec Amended:            | 4/7/83     |
| Resolution:              | CS 6050    |
| Established:             | 4/4/88     |
| Resolution:              | CC88-0182  |
| Spec Adopted:            | 10/31/88   |
| Resolution:              | CS88-091   |
| Spec Amended:            | 11/2/95    |
| Resolution:              | CS95-105   |
| Spec Amended:            | 5/3/01     |
| Resolution:              | CS01-050   |
| Spec Amended:            | 2/15/07    |
| Resolution:              | CS07-018   |
| Spec Amended:            | 7/2/09     |
| <del>Spec Amended:</del> |            |
| Resolution:              | CS09-037   |
| CS Status:               | Classified |
| Unit:                    | T&M        |
| FLSA Status:             | Non-Exempt |

### DEFINITION

Under general supervision, installs, repairs, maintains, and modifies electromechanical and electronic traffic signal, streetlight, and other control devices; performs skilled electronic and electrical maintenance, repair and modification work; performs related work as assigned.

### CLASS CHARACTERISTICS

Traffic Signal Electrician is the skilled, journey level class in the Traffic Signal Electrician series. It is distinguished from Senior Traffic Signal Electrician, which provides lead direction to the crew in addition to performing skilled work.

### PRINCIPAL DUTIES (Illustrative Only)

- 1.● Repairs or replaces malfunctioning traffic signal control systems and street light systems.
- 2.● Repairs and calibrates complex electronic control devices.
- 3.● Performs maintenance of equipment, control devices and component parts.
- 4.● Responds to traffic control malfunction requests on call or as assigned.
- 5.● Maintains a variety of records and logs of malfunctions and work performed.
- 6.● Inspects traffic control and lighting systems installed by contractors to ensure conformity with plans, specifications and prevailing electrical codes.
- 7.● Adjusts semi-actuated, fully actuated and fixed timing signals to give priority to ~~traffic~~ traffic patterns.
- 8.● Observes safe work methods and safety precautions relevant to the work.
- 9.● Assists in designing and implementing maintenance procedures.
- 10.● May work with other electricians repairing, installing and maintaining electrical systems city-wide.
- 11.● Assists with training Traffic Signal Electrician Trainees
- 12.● Uses and maintains a wide variety of hand, power and shop tools, test equipment and other equipment related to the work.
- 13.● Reads and interprets schematics, plans, manuals and blueprints; prepares as-built drawings of work performed.
- 14.● Makes rough estimates of labor, materials and equipment required to perform assigned work.

### MINIMUM QUALIFICATIONS

#### Education/Experience:

Possession of a high school diploma or GED and three (3) years of experience at a level equivalent to the City's Traffic Signal Electrician Trainee or four (4) years of journey level working experience in the maintenance and repair of electronic devices and equipment. A minimum of 18 semester units in

electrical, electronics, or similar course work is required. An Associates of Arts degree in electronics or a closely related field may be substituted for two (2) years of working experience and the 18 semester units of course work.

Other Requirements:

- Must possess a valid California driver's license.
- ~~Must possess sufficient strength and stamina to lift and carry objects weighing up to 95 pounds.~~
- ~~Must be willing to work out of doors in all weather conditions, to work from aerial buckets and underground in confined places and with possible exposure to potentially hazardous substances.~~
- ~~Must be willing to work overtime and off hours shifts in emergency situations.~~

Knowledge of:

- Electrical and electronic theory and practices, including analog and digital solid state devices;
- Methods, practices and tools used in electrical and electronic installation, maintenance, testing and repair work;
- Operation and maintenance of a wide variety of hand, power and shop tools, test equipment and other equipment common to electrical and electronic work;
- Safety principles and precautions related to the work;
- Codes, ordinances and regulations pertaining to the work;
- Basic computer theory, electrical mathematics including algebra, and basic electronics;
- Computer applications related to the work.

Skill in:

- Operating and maintaining a variety of hand, power and shop tools and equipment used in electrical installation, maintenance and repair work;
- Understanding and following oral and written instructions;
- Properly placing cones, barricades and warning devices and directing traffic flow at job sites;
- Exercising independent judgement and initiative without close supervision;
- Reading and interpreting schematics, blueprints, plans and specifications;
- Preparing basic records;
- Estimating materials and equipment necessary to complete assigned jobs;
- Establishing and maintaining effective working relationships with those contacted in the course of the work;
- Working on high voltage electrical circuits.

Physical/Mental Abilities:

- Mobility – Ability to stoop, kneel, reach, sit, stand, move, and engage in repetitive motions; ability to operate and work from a bucket truck (bucket trucks have a maximum capacity of 300 pounds);

- Lifting – Possess sufficient strength to lift and carry objects weighing up to 95 pounds; ability to lift 25 pounds overhead to install and repair equipment; ability to carry 25 pounds from work shop to vehicle;
- Vision – Constant use of overall vision; frequent reading and close-up work; ability to read fine print and normal size print and detect color; frequent color and depth vision;
- Dexterity – Frequent repetitive motion; frequent typing; constant grasping, holding, and frequent reaching;
- Hearing/Talking – Frequent hearing and talking, in person and on the phone;
- Mental – Ability to comprehend and communicate oral and written instructions;
- Emotional/Psychological – Frequent decision-making and concentration; frequent public and/or coworker contact; occasional working alone;
- Environmental Conditions – Occasional exposure to frequent noise, outdoor and various weather conditions, indoor cold and heat, exposure to traffic, working at heights, exposure to hazardous materials; exposure to bio-hazards, walking on uneven ground, working around equipment and machinery, and ability to perform work in underground and confined spaces, and at heights up to 50 feet around energized equipment;
- Working Conditions – Field and office work may be loud at times; and
- Special Requirements: Occasional weekend, evening, or night work; must be willing to respond to and work overtime and off-hours shifts in emergency situations.

*This class specification should not be interpreted as all inclusive. It is intended to identify the essential functions and requirement of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the American with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.*

APPROVED:

Original signed by

LAURIE MONTESDIANNA R. GARCIA  
—DEPUTY CITY MANAGER/ INTERIM  
DIRECTOR OF HUMAN RESOURCES

DATE: June 10, 2009

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