

**Honorable Mayor and Members
of the City Council
City Hall
Torrance, CA**

SUBJECT: HR - Approve the Revised Class Specifications for Traffic Signal Technician, Electrician and Traffic Painter

RECOMMENDATION

Recommendation of the Human Resources Director and the Civil Service Commission that City Council approve the following:

- A. The revised and re-titled class specification Traffic Signal Technician
- B. The revised class specification for Electrician
- C. The revised class specification for Traffic Painter

FUNDING No Impact.

BACKGROUND

The Public Works Director requested a study of the classifications of Electrician and Traffic Painter in the Public Works Department. Results of the study resulted in a division of the Electrician classification into two separate classifications of Electrician and Traffic Signal Technician. In addition, the Traffic Painter class specification required revision as it has not been studied since 1967.

At their meeting of November 23, 2009, the Civil Service Commission approved the revised and re-titled class specification for Traffic Signal Technician, and the revised class specifications for Electrician and Traffic Painter (Attachment A). This recommendation is submitted to your Honorable Body for your review and approval.

ANALYSIS

The classification study revealed that current job descriptions do not clearly define or recognize the varying levels of job complexity, decision making, responsibility, authority, knowledge, skills, and abilities that exist within each job classification.

The current job descriptions, therefore, do not clearly define career paths within and/or across job families and/or operating units, which could limit staffing flexibility and inhibit employee growth and development.

It was also found that job descriptions required updating to ensure regulatory compliance with the Americans with Disabilities Act and the Fair Labor Standards Act.

Results of the study reflected by the proposed classification title are listed below.

- Four positions currently classified as Electricians would be more appropriately classified as the new class of Traffic Signal Technician to reflect the nature and scope of the job.
- The remaining two positions would remain in the classification as Electrician.
- The Traffic Painter required revision as it had not been studied since 1967 and required updating.

Traffic Signal Technician (Attachment B)

The existing Electrician class specification was not reflective of the duties performed, qualification guidelines and experience and education requirements. In addition, the title change was required from Electrician to Traffic Signal Technician. This classification is responsible for maintaining, repairing, and performing modifications to traffic signal control equipment, wiring systems, outdoor overhead lighting, and other electrical devices and perform other related work as required.

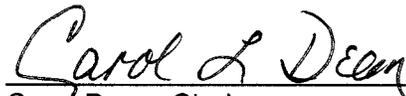
Electrician (Attachment C)

The existing Electrician class specification was updated to reflect the duties performed, the qualification guidelines and experience and education requirements. This classification performs skilled journey level electrical work involving installation, maintenance and repair of electrical power and service wiring, control panels, motors and related electrical equipment in City facilities; and performs related work as required.

Traffic Painter (Attachment D)

The existing Electrician class specification was updated to reflect the duties performed, the qualification guidelines and experience and education requirements. This classification performs skilled work in traffic line and legend painting, fabricating traffic regulatory warning and directional signs, and installing and maintaining signs and sign posts; and performs other related work as required.

Respectfully submitted,
CIVIL SERVICE COMMISSION



Carol Dean, Chair

ELAINE M. WINER
Human Resources Director



By Melody P. Lawrence
Human Resources Manager

CONCUR:



Elaine M. Winer
Human Resources Director

NOTED:



LeRoy J. Jackson
City Manager

Attachments:

- A. Civil Service Commission Meeting Item #8 November 23, 2009

Council Meeting
November 23, 2009

Honorable Chair and Members
of the Civil Service Commission
City Hall
Torrance, CA

SUBJECT: HR - Approval of the Revised Re-titled Class Specification for Traffic Signal Technician and Approval of the Revised Class Specifications for Electrician and Traffic Painter

RECOMMENDATION

Recommendation of the Human Resources Director that the Civil Service Commission approve the following:

- A. The revised and re-titled class specification Traffic Signal Technician
- B. The revised class specification for Electrician
- C. The revised class specification for Traffic Painter

BACKGROUND

The Public Works Director requested a study of the classifications of Electrician and Traffic Painter in the Public Works Department. Results of the study resulted in a division of the Electrician classification into two separate classifications of Electrician and Traffic Signal Technician. In addition, the Traffic Painter class specification required revision as it has not been studied since 1967.

The City has met and conferred with TME-AFSCME who concurs in the recommendation before your Honorable Body.

ANALYSIS

The classification study revealed that current job descriptions do not clearly define or recognize the varying levels of job complexity, decision making, responsibility, authority, knowledge, skills, and abilities that exist within each job classification.

The current job descriptions, therefore, do not clearly define career paths within and/or across job families and/or operating units, which could limit staffing flexibility and inhibit employee growth and development.

It was also found that job descriptions required updating to ensure regulatory compliance with the Americans with Disabilities Act and the Fair Labor Standards Act.

Results of the study reflected by the proposed classification title are listed below.

- Four positions currently classified as Electricians would be more appropriately classified as the new class of Traffic Signal Technician to reflect the nature and scope of the job.
- The remaining two positions would remain in the classification as Electrician.
- The Traffic Painter required revision as it had not been studied since 1967 and required updating.

Traffic Signal Technician (Attachment A)

The existing Electrician class specification was not reflective of the duties performed, qualification guidelines and experience and education requirements. In addition, the title change was required from Electrician to Traffic Signal Technician. This classification is responsible for maintaining, repairing, and performing modifications to traffic signal control equipment, wiring systems, outdoor overhead lighting, and other electrical devices and perform other related work as required.

Electrician (Attachment B)

The existing Electrician class specification was updated to reflect the duties performed, the qualification guidelines and experience and education requirements. This classification performs skilled journey level electrical work involving installation, maintenance and repair of electrical power and service wiring, control panels, motors and related electrical equipment in City facilities; and performs related work as required.

Traffic Painter (Attachment C)

The existing Electrician class specification was updated to reflect the duties performed, the qualification guidelines and experience and education requirements. This classification performs skilled work in traffic line and legend painting, fabricating traffic regulatory warning and directional signs, and installing and maintaining signs and sign posts; and performs other related work as required.

Respectfully submitted,

By Melody Lawrence
Melody Lawrence
Human Resources Manager

CONCUR:

Elaine M. Winer
Elaine M. Winer
Human Resources Director

Jeannie Moorman
Jeannie Moorman
TME-AFSCME President

Greg Ferguson
Greg Ferguson
TME-AFSCME Vice President

NOTED:

Laura Lobnes
Laura Lobnes
Civil Service Manager

Attachments:

- A. Proposed Class Specification for Traffic Signal Technician
- B. Proposed Class Specification for Electrician
- C. Proposed Class Specification for Traffic Painter

TRAFFIC SIGNAL TECHNICIAN

DEFINITION

Under general supervision, maintains, repairs, and performs modifications to traffic signal control equipment, wiring systems, outdoor overhead lighting, and other electrical devices and performs other related work as required.

DISTINGUISHING CHARACTERISTICS

Distinguished from Traffic and Lighting Supervisor in that the incumbent regularly performs maintenance, repairs and modifications to traffic signal control equipment. At this level, incumbents work with only occasional instruction or assistance; work requires incumbents to exercise judgment in selecting appropriate guidelines to follow; significant deviations require prior approval.

SUPERVISION EXERCISED/RECEIVED

Supervision is received from the Traffic and Lighting Supervisor. Traffic Signal Technician may provide technical direction to lower level classifications.

EXAMPLES OF ESSENTIAL DUTIES

The following duties represent the principal job duties however, they are not all-inclusive.

the installation, maintenance and repair of City traffic signals, outdoor overhead lighting, signs, pavement markings and other assigned traffic control devices; inspects timing, operations, and/or conditions of signals, markings and signs;

- Performs skilled electrical work in the installation, operation, general maintenance, repair, and adjustment of traffic signals.
- Makes field and emergency repairs on traffic signal equipment, such as signal heads, traffic signal standards, detector loops, video detection and controllers.
- Repairs of traffic signals and controllers
- Assists with relocations and modifications of traffic signals and electronic equipment at street intersections.
- Installs street traffic detectors, video cameras pedestrian push button units, safety lights and large illuminated traffic signs.
- Synchronizes traffic signal systems;
- Turns on and tests traffic signals and makes timing adjustments.
- Cleans, tests, repairs, and overhauls controllers, coordinators, program clocks, computers, and other electric and electronic equipment in the shop.
- Ensures safe repairs to the City's outdoor overhead lighting systems;
- Performs scheduled maintenance and group re-lamping on the City's outdoor overhead lighting systems.
- Tests electronic and electrical circuits, transformers, and other related equipment.
- Assists with re-wiring of controllers.
- Checks and adjusts traffic signal coordination and timing, and performs preventive maintenance work.
- Reads and interprets traffic signal and electrical wiring diagrams, sketches and schematics. Helps repair other electronic or electrical devices or equipment.
- Maintains and properly utilizes electronic and electrical tools and equipment.

ATTACHMENT A

EXAMPLES OF OTHER DUTIES

The following duties represent duties that are generally performed by this position, but are not considered to be principal job duties:

- Responds to emergency calls during work and after normal working hours.
- Assists in the training of new and lower classification employees.
- Maintains and cleans equipment and tools; maintains a clean and orderly workplace.
- May maintain field reports, and work orders.
- Performs other related duties

QUALIFICATION GUIDELINES

Knowledge of:

- Materials, methods, and equipment used in the modification, maintenance, and repair of electronic and solid state digital control devices including traffic signals.
- Standard tools, methods, and practices of the electronic and electrician trade.
- Functions and uses of electrical testing equipment.
- Functions and uses of hand tools used in electronic and electrical repairs.
- Wiring practices.
- Schematic wire size and the proper wire use.
- Traffic safety procedures and delineation with cones.

Ability to:

- Perform heavy and physically demanding work for lengthy and continuous period of time.
- Use and operate an aerial boom truck and crane.
- Use of power and hand tools such as a jackhammer.
- Read electronic technical manuals.
- Read and interpret plans, wiring diagrams, blue prints and technical regulations.
- Set up a jobsite in a safe manner.
- Access the digital computer to control traffic signal control timing devices.
- Fit and adjust conduit in the traffic signal installation process.
- Apply electronic principles and practices.
- Establish and maintain cooperative relationships with co-workers, the public, other City departments and individuals from other agencies.
- Exercise sound judgment in stressful situations.
- Understand and follow detailed oral and written instructions.
- Speak, read, and write basic English.
- Maintain basic records, complete reports and perform basic arithmetic computations.
- Learn City policies and procedures affecting departmental operations, generally City operations and utilize new skills and information to improve job performance and efficiency.

LICENSE OR CERTIFICATE:

Possession of a valid California Class C driver's license.

Level One International Municipal Signal Association (IMSA) Traffic Signal Certificate within six (6) months of appointment (once obtained, must possess and maintain). Level Two International Municipal Signal Association (IMSA) Traffic Signal Certificate is desirable.

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EDUCATION AND EXPERIENCE:

Any combination of education and experience that would have provided the knowledge and skills required is qualifying. A typical way to obtain the knowledge and skills would be:

Two years of experience in the maintenance, repair, and installation of electrical and electronic equipment that includes at least one year of experience in the maintenance and repair of traffic control equipment. Satisfactory completion of college level courses in electronics and/or computer programming may be substituted for experience on a year-for-year basis.

SPECIAL REQUIREMENTS

Performance of the essential duties of this position includes the following physical demands and/or working conditions:

Requires the mobility to stand, stoop, reach and bend, and mobility of arms to reach and dexterity of hands to grasp and manipulate small objects. Requires the ability to stand for long periods, maintain balance and walk long distances. Requires the ability to frequently lift, carry, push, pull or otherwise move objects which may weigh up to 50 pounds. Requires the ability to climb ladders of various heights. May be required to work around moving mechanical parts and electrical equipment in a safe manner. Tasks require color and visual perception and discrimination, as well as oral communications ability. Work is regularly performed outside in seasonal climate and weather conditions. May be required to work in inclement weather without effective protection from sun, cold, and rain. May be required to work within enclosed spaces or at heights above ground level.

CAREER LADDER INFORMATION

Experience gained in this classification may serve to meet the minimum requirements for promotion to Traffic and Lighting Supervisor.

ELECTRICIAN

DEFINITION

Under general direction, performs skilled journey level electrical work involving installation, maintenance and repair of electrical power and service wiring, control panels, motors and related electrical equipment in City facilities; and performs related work as required.

DISTINGUISHING CHARACTERISTICS

An Electrician performs skilled journey level electrical work. Distinguished from a Traffic Signal Technician in that an incumbent does not perform maintenance, repairs and modifications to traffic signal control equipment. At this level, incumbents work with only occasional instruction or assistance; work requires incumbents to exercise judgment in selecting appropriate guidelines to follow; significant deviations require prior approval.

SUPERVISION EXERCISED/RECEIVED

Supervision is received from the Heating and Air Conditioning Supervisor. Electricians may provide technical direction to lower level classifications.

EXAMPLES OF ESSENTIAL DUTIES

The following duties represent the principal job duties however; they are not all-inclusive.

- Installs, maintains, repairs and replaces electrical facilities and equipment in City buildings, parks, airport and other facilities.
- Installs, maintains and relocates electrical panels and components.
- Repairs and replaces electrical controls and devices.
- Installs and maintains parks and parking lot lighting circuits.
- Replaces lamps and damaged light poles.
- Maintains and repairs pumping station alarms, motors and control circuits.
- Meets with representatives from outside organizations regarding electrical equipment.
- Revises and designs electrical systems as necessary.
- Tests electrical equipment, emergency power generators and automatic transfer panels.
- Ensures proper stock is maintained to accomplish work assignments.
- Estimates job costs.
- Uses and enters information utilizing a computerized maintenance management system.
- Performs preventive maintenance on electrical equipment and facilities.
- Observes safety rules and regulations
- Works from blueprints, schematic diagrams, sketches, and oral and written instructions.
- Installs and repairs conduits, lighting circuits, panels, regulators, generators, relays, circuit breakers, switch boxes and electrical fixtures according to codes.

EXAMPLES OF OTHER DUTIES

The following duties represent duties that are generally performed by this position, but are not considered to be principal job duties:

- May determine job requirements.
- Responds to emergency calls during work and after normal working hours.
- Assists in the training of new and lower classification employees.

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- Maintains and cleans equipment and tools.
- Maintains a clean and orderly workplace.
- May maintain field reports, and work orders.
- Performs other related duties.

QUALIFICATION GUIDELINES

Knowledge of:

- Principles of electrical and electronic repair, maintenance and system design.
- State, Federal and Local Electrical Codes.
- Safety requirements of working with high and low voltage circuits.
- Solid state and electromechanical equipment.
- Materials, methods, and equipment used in the modification, maintenance, and repair of electronic and electromechanical equipment and solid state digital control devices.
- Standard tools, methods, and practices of the electronic and electrician trade.
- Functions and uses of electrical testing equipment.
- Functions and uses of hand tools used in electronic and electrical repairs.
- Wiring practices.
- Schematic wire size and the proper wire use.

Ability to:

- Perform heavy and physically demanding work for lengthy and continuous period of time.
- Use and care for tools and equipment used in maintaining and repairing electrical and electronic devices.
- Read electronic technical manuals.
- Read and interpret plans, wiring diagrams, blue prints and technical regulations.
- Apply electronic principles and practices.
- Establish and maintain cooperative relationships with co-workers, the public, other City departments and individuals from other agencies.
- Understand and follow detailed oral and written instructions.
- Set up a jobsite in a safe manner.
- Prepare and maintain records, reports, and work estimates.
- Maintain basic records, complete reports and perform basic arithmetic computations.
- Learn City policies and procedures affecting departmental operations, generally City operations and utilize new skills and information to improve job performance and efficiency.

LICENSE OR CERTIFICATE:

Possession of a valid California Class C driver's license.

EDUCATION AND EXPERIENCE:

Any combination of education and experience that would have provided the knowledge and skills required is qualifying. A typical way to obtain the knowledge and skills would be:

Two years of experience at the journey level after the successful completion of a recognized electrician apprenticeship or certification program or five years of experience in the installation, alteration, and repair of commercial and industrial electrical wiring systems and equipment, of which one year must have been at the journey-level.

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SPECIAL REQUIREMENTS

Performance of the essential duties of this position includes the following physical demands and/or working conditions:

Requires the mobility to stand, stoop, reach and bend, and mobility of arms to reach and dexterity of hands to grasp and manipulate small objects. Requires the ability to stand for long periods, maintain balance and walk long distances. Requires the ability to frequently lift, carry, push, pull or otherwise move objects which may weigh up to 50 pounds. Requires the ability to climb ladders of various heights. May be required to work around moving mechanical parts and electrical equipment in a safe manner. Tasks require color and visual perception and discrimination, as well as oral communications ability. Work is regularly performed outside in seasonal climate and weather conditions. May be required to work in inclement weather without effective protection from sun, cold, and rain. May be required to work within enclosed spaces or at heights above ground level.

CAREER LADDER INFORMATION

Experience gained in this classification in addition to training, coursework and required certifications may serve to meet the minimum requirements for promotion to Traffic and Lighting Supervisor.

TRAFFIC PAINTER

DEFINITION

Under general supervision, performs skilled work in traffic line and legend painting, fabricating traffic regulatory warning and directional signs, and installing and maintaining signs and sign posts; and performs other related work as required.

DISTINGUISHING CHARACTERISTICS

Distinguished from Traffic and Lighting Supervisor in that the incumbent regularly performs work in traffic line and legend painting, fabricating traffic regulatory warning and directional signs, and installing and maintaining signs and sign posts. At this level, incumbents work with only occasional instruction or assistance; work requires incumbents to exercise judgment in selecting appropriate guidelines to follow; significant deviations require prior approval.

SUPERVISION EXERCISED/RECEIVED

Supervision is received from the Traffic and Lighting Supervisor. The Traffic Painter may provide technical direction to lower level classifications.

EXAMPLES OF ESSENTIAL DUTIES

The following duties represent the principal job duties however; they are not all-inclusive.

- Paints pavement markings including legends, school crossings, and crosswalks, while operating a flatbed truck with airless spray unit, airless spray gun, and stencils.
- Paints City curbs to regulate parking, utilizing a flatbed truck with airless unit, and an airless spray gun.
- Paints traffic lines while operating a self-propelled line striper with airless spray unit and regulators.
- Properly cleans the equipment, flushing out all hoses and spray guns and cleaning and lubricating the automatic spray guns; Makes minor repairs.
- Operates and maintain high temperature thermoplastic applying equipment
- Installs and repairs signs, replacing defective, destroyed, or damaged traffic signs, and placing new traffic signs to regulate, safeguard, and expedite traffic.
- Utilizes posthole digger, shovels, digging bars, brooms, ladders, and other hand and power tools.
- Fabricates signs for traffic control and direction.
- Correctly lays out letters on the sign blank.
- Lays out regulation traffic lines on new City streets, checking and reading blueprints approved by the City Engineer.
- Utilizes ropes, paints traffic dots to guide the street striping operation, measuring all traffic lane lines according to the blueprint specifications.
- Installs traffic directional pavement buttons utilizing epoxy and placing the pavement buttons in accordance with the specifications and blueprints.
- Paints traffic lines in City parking lots, tennis and basketball courts, utilizing traffic line striper.
- Thins and mixes paints to proper consistency to enable the effective application.
- Lays out job sites, placing safety signs and devices sufficient to protect all members of the crew.

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- Performs routine and light maintenance of equipment including cleaning and maintaining paint spray outfits, brushes, templates, stencils, paint truck and other equipment.

EXAMPLES OF OTHER DUTIES

The following duties represent duties that are generally performed by this position, but are not considered to be principal job duties:

- Responds to emergency calls during work and after normal working hours.
- Assists in the training of new and lower classification employees.
- Maintains and cleans equipment and tools; maintains a clean and orderly workplace.
- May maintain field reports, and work orders.
- Performs other related duties

QUALIFICATION GUIDELINES

Knowledge of:

- Methods and techniques used in applying paint safely to a variety of street surfaces.
- Techniques used in traffic control.
- Methods for thinning and mixing paint.
- Techniques, materials and supplies used in traffic painting operations.
- Functions, characteristics and use and care of common hand and power tools.
- Operation of power driven maintenance equipment such as trucks.
- Traffic safety procedures and delineation with cones.

Ability to:

- Perform heavy and physically demanding work for lengthy and continuous period of time.
- Work carefully and efficiently under hazardous traffic conditions.
- Thin paints to a proper consistency.
- Operate a variety of traffic painting equipment.
- Work on ladders and/or aerial lift devices.
- Apply paint by spray machine and manually.
- Understand and follow verbal and written instructions.
- Keep simple records.
- Set up a jobsite in a safe manner.
- Establish and maintain cooperative relationships with co-workers, the public, other City departments and individuals from other agencies.
- Exercise sound judgment in stressful situations.
- Understand and follow detailed oral and written instructions.
- Speak, read, and write Basic English.
- Maintain basic records, complete reports and perform basic arithmetic computations.
- Learn City policies and procedures affecting departmental operations, generally City operations and utilize new skills and information to improve job performance and efficiency.

LICENSE OR CERTIFICATE:

Possession of a valid California Class C driver's license, class B desirable.
International Municipal Signal Association (I.M.S.A.) Work Zone Safety and level 1 Signs and Markings certificate is desirable.

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EDUCATION AND EXPERIENCE:

Any combination of education and experience that would have provided the knowledge and skills required is qualifying. A typical way to obtain the knowledge and skills would be:

Graduation from high school or equivalent and one year of experience performing maintenance, repair or construction work preferably in highway painting or traffic sign installation.

SPECIAL REQUIREMENTS

Performance of the essential duties of this position includes the following physical demands and/or working conditions:

Require vision (which may be corrected) to read small print. Requires the mobility to stand, stoop, reach and bend, and mobility of arms to reach and dexterity of hands to grasp and manipulate small objects. Requires the ability to stand for long periods, maintain balance and walk long distances. Requires the ability to perform frequent lifting, pushing and/or pulling of objects which may approximate 50 pounds and may occasionally weigh up to 75 pounds. Requires the ability to climb ladders of various heights. Tasks require color and visual perception and discrimination, as well as oral communications ability. Work is regularly performed outside in seasonal climate and weather conditions. May be required to work in inclement weather without effective protection from sun, cold, and rain. May be required to work within enclosed spaces or at heights above ground level. May be required to work around moving mechanical parts. May be required to work around electrical current.

CAREER LADDER INFORMATION

Experience gained in this classification may serve to meet the minimum requirements for promotion to Public Works Supervisor.