

CITY OF MADISON POSITION DESCRIPTION

Name of Employee (or "vacant"):

Michael Christoph

Work Phone: 608-266-4767

2. Class Title (i.e. payroll title):

Electrical Operations Leadworker

3. Working Title (if any):

4. Name & Class of First-Line Supervisor:

David Dryer, Traffic Engineer & Parking Manager

Work Phone: 266-4761

5. Department, Division & Section:

Transportation Department
Traffic Engineering Division
Electrical Section

6. Work Address:

1120 Sayle Street, Madison, WI 53715

7. Hours/Week: 40.0

Start time: 7:00 a.m. End time: 3:30 p.m.

8. Date of hire in this position:

01/29/2006

9. From approximately what date has employee performed the work currently assigned:

01/29/2006

10. Position Summary:

This is a highly skilled technical, master electrician level leadworker position in the Electrical Section of Traffic Engineering. Under limited supervision, this position is responsible for coordinating and overseeing the installation and repair of complex electrical/electronic computerized equipment associated with traffic signals, street lighting, fiber optic network, and other City-maintained equipment and systems. The work of this position is characterized by the exercise of independent judgment in laying out work and directing Electrical Section employees.

11. Functions and Worker Activities: (Do NOT include duties done on an "Out-of-Class" basis.)
- 15% A. Install, modify, maintain, repair, program, and update traffic signal & street lighting systems.
 1. Program and monitor the operation of controllers and computer systems used for traffic signals & street lighting.
 2. Assist engineers in the research/design of equipment used for traffic signals, street lights, and fiber network systems.
 3. Assist engineers with and/or develop techniques and designs to integrate new and existing equipment as applicable.
 4. Test and develop programs used for traffic signals, street lights, and related activities.

 - 40% B. Install, modify, maintain, and repair traffic signals, street lights, emergency alarm systems at a master electrician level and/or in a leadworker capacity.
 1. Install, modify, maintain and repair traffic signal equipment (e.g signal poles, signal heads and related traffic signal hardware; pour concrete, computer-based controllers, vehicle detectors, cameras, microwave and radar induction loops, etc).
 2. Install, modify, maintain and repair street light equipment (e.g. set poles, arms, fixtures, ballasts, transformers, electrical vaults, photocells, control panels, fuses, etc).
 3. Install electrical services.
 4. Respond to and make emergency repairs (accidents, contractor hits, etc)
 5. Locate and mark underground utilities (Digger's Hotline).
 6. Attend pre-construction meetings

 - 10% C. Network installation, modification, troubleshooting, & repair
 1. Oversee the installation and repair of City fiber optic network operations.
 2. Document network installations and modifications.
 3. Install other network cables and devices (e.g.: LAN; Ethernet)
 4. Install, maintain, and repair surveillance cameras.
 5. Provide technical support to City Information Technology Department

 - 30% D. Perform general leadworker duties
 1. Prioritize, plan, assign, train, oversee and review daily work of section employees.
 3. Review work reports and end of project billings and maintain related data bases.
 4. Oversee the electrical section inspection of contractors involved in City projects.
 5. Oversee material ordering. Review and maintain inventory as needed.

 - 5% E. Perform miscellaneous worker activities
 1. Perform electrical inspections, direct contractors, and make field modifications as needed. Ensure compliance with state and local public work specifications.
 2. Complete and verify daily work orders and records for installations, modifications, repairs, scheduled maintenance, and billing information
 3. Complete "as built" drawings.
 4. Perform emergency repair work as needed, including standby duties.
 5. Other duties as assigned.

12. Primary knowledge, skills and abilities required:

Thorough knowledge of the installation, operation, maintenance, repair of traffic signals and street lighting systems including computerized controllers; fiber optics and related networking equipment, alarm systems and associated equipment. Thorough knowledge of computers and computer-based equipment and the ability to use associated programs and develop special-purpose applications. Working knowledge of basic traffic signal timing principles. Ability to understand and operate complex electronic controls and devices used in traffic signal, lighting, and emergency alarm systems. Thorough knowledge of streetlights, circuits, and related equipment. Thorough knowledge of underground equipment locating methods and techniques. Thorough knowledge of electrical occupational hazards and safety precautions; thorough knowledge of work zone safety procedures. Ability to comprehend and accurately perform work

from schematics, penciled layouts, specifications, written and/or verbal instructions. Ability to maintain related records and prepare reports. Ability to train and direct crews in the repair, modification, maintenance, and installation of TE related equipment. Ability to establish and maintain effective working relationships with assigned staff, contractors and other city agencies; to communicate effectively both orally and in writing. Ability to perform electrical inspections. Ability to operate a variety of aerial lift vehicles, digging, trenching, and other construction equipment. Ability to use color-coded wiring systems. Ability to engage on a daily basis in strenuous physical activity and to perform under adverse weather conditions. Ability to maintain and clean equipment and work areas. Ability to lift 100 pounds occasionally and to lift 50 pounds regularly. Ability to maintain adequate attendance. Ability to work nights and weekends as required.

13. Special tools and equipment required:

Computers and/or computer type equipment. Aerial & line trucks, skid loader & attachments including back hoe and trencher, air hammer, concrete saws and construction related tools (power and small hand tools. Electronic test equipment, high voltage test & related safety equipment; fiber optic splicing equipment.

14. Required licenses and/or registration:

Master Electrician License (State of WI)
CPR Certification
Signal Electrician Certification – Level 2
Class A CDL

15. Physical requirements:

Ability to engage in strenuous physical activity; ability to lift/carry objects weighting up to 100 lbs on occasion & objects weighing 50 lbs on a regular basis. Position requires a high percentage of work outdoors in all weather conditions and in high traffic situations at various heights above the ground. Employees must be able to frequently walk, bend, squat, climb, kneel, stoop and lift arms overhead to perform work for extended periods of time.

16. Supervision received (level and type):

Reviewed for overall results (limited supervision)

17. Leadership Responsibilities:

This position: is responsible for supervisory activities (Supervisory Analysis Form attached).
 has no leadership responsibility.
 provides general leadership (please provide detail under Function Statement).

18. Employee Acknowledgment:

I prepared this form and believe that it accurately describes my position.
 I have been provided with this description of my assignment by my supervisor.
 Other comments (see attached).

EMPLOYEE

DATE

19. Supervisor Statement:

- I have prepared this form and believe that it accurately describes this position.
- I have reviewed this form, as prepared by the employee, and believe that it accurately describes this position.
- I have reviewed this form, as prepared by the employee, and find that it differs from my assessment of the position. I have discussed these concerns with the employee and provided them with my written comments (which are attached).
- I do not believe that the document should be used as the official description of this position (i.e., for purposes of official decisions).
- Other comments (see attached).

SUPERVISOR

DATE

Note: Instructions and additional forms are available from the Human Resources Dept., Room 501, City-County Bldg. or by calling 266-4615.