

City of Bellingham
Classification Specification - Civil Service or AFSCME

CLASS TITLE	Signal Systems Specialist
DEPARTMENT	Public Works\Engineering
UNION:	114
SG:	15
CS:	Yes
FLSA:	Y
EE04CODE:	TE

NATURE OF WORK:

Performs skilled analysis, field observation, data collection and troubleshooting of traffic signal, intelligent transportation and street lighting systems; assists the Traffic Operations Engineer in developing safety and efficiency improvement programs for such systems; installs signal system hardware and software; operates traffic management surveillance and centralized computer systems, and performs data entry to implement any changes in system operation.

DISTINGUISHING CHARACTERISTICS:

The Signal Systems Specialist classification is a stand-alone classification. It is distinguished from the Electronics Technician and Electronics Specialist classifications by its comprehensive knowledge in the analysis, monitoring and operation of complex traffic signal and Intelligent Transportation Systems (ITS) systems, as opposed to repairing and maintaining a variety of electronic systems used throughout the City.

SUPERVISORY RELATIONSHIPS:

Reports to the Transportation Engineering Manager. Accepts direction and work assignments from the Traffic Operations Engineer.

ESSENTIAL FUNCTIONS:

1. Assists the Traffic Operations Engineer in developing traffic signal timing and coordination plans.
2. Responds to complaints and inquiries from the public, and performs routine field observations to verify that traffic signal and ITS control equipment is operating correctly and in the most efficient manner.
3. Troubleshoots operational malfunctions in traffic signal and ITS systems and makes recommendations for repair.
4. Operates and programs Closed Circuit Television (CCTV) camera equipment for surveillance of traffic congestion.

5. Programs traffic signal and ITS control equipment both manually and through the use of closed-loop signal system software on a central computer system.
6. Collects field data and maintains computerized database inventories for signal timing records and accident information.
7. Assists contractors with traffic signal, ITS and street lighting questions and makes temporary signal timing and operational changes to accommodate for construction activities, lane closures or damaged loops.
8. Marks field locations for the installation of new loops, intersection pavement markings and traffic control devices.
9. Assists the Traffic Operations Engineer in developing improvements for traffic signal, ITS and street lighting projects and standard specifications.

ADDITIONAL WORK PERFORMED:

1. Other duties as assigned.

KNOWLEDGE AND SKILLS:

- Knowledge of traffic signal systems, street lighting systems, and intelligent transportation systems.
- Knowledge of standard construction practices and standards for work zone traffic control.
- Knowledge of pertinent local, state and federal laws related to traffic signal design and operation.
- Knowledge of closed-loop signal systems and National Electrical Manufacturers Association (NEMA) traffic controllers.
- Proficiency in the use of desktop computer software including word processing, spreadsheets, and traffic signal software including Econolite Aries and Peek CLMATS software.
- Ability to communicate effectively both orally and in writing, and to foster a team work environment.
- Ability to work outdoors in all types of weather conditions.
- Ability to establish and maintain effective working relationships with diverse groups including fellow employees, City officials, governmental agencies, community groups, developers, transportation consultants and the general public.
- Must demonstrate ability to work independently with minimum of down time.
- Must demonstrate ability to maintain, program and time all models and makes of traffic control equipment in use by the City.

WORKING ENVIRONMENT:

Work is performed both in a professional office environment and in the field, exposing employee to inclement weather and traffic hazards. Occasional work at heights in a bucket truck may be required and some travel is involved in the work.

EXPERIENCE AND TRAINING REQUIREMENTS:

- Two (2) years vocational or college-level education in engineering technology with significant electrical or transportation related coursework, AND
- Two (2) years work experience as an Electronics or Traffic Signal Technician with IMSA Level II Signal Technician certification
- OR-
- Four (4) years prior transportation or signal systems experience.

NOTE: IMSA Level II certification preferred. Ability to obtain certification is required within six (6) months of hire.

NECESSARY SPECIAL REQUIREMENT:

- Valid Washington State drivers license and good driving record. Applicants must submit a three-year driving abstract prior to hire.
- Adaptability and flexibility to accept schedule changes as necessary, and willingness to accept "call out" status for emergency situations.

PREPARED BY: C. Williams
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1/01

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