City of Bellingham
Classification Specification

CLASS TITLE	**Maintenance Specialist**
DEPARTMENT	**Public Works - Operations**
UNION:	**1937**
SG:	**115**
CS:	**Entry**
FLSA:	**Y**
EE04/SOC CODE:	**SC/49-9070**

NATURE OF WORK:

Performs skilled maintenance work in a specialized field requiring extensive technical knowledge, skills and abilities; assists supervisor in coordinating the daily activities of assigned staff. Assists with planning and prioritizing; prepares and distributes work assignments for the section. Performs technical preventative and corrective maintenance, troubleshooting and repair of complex mechanical, electrical and electronic equipment, systems and facilities. Implements and maintains a computerized maintenance management system.

DISTINGUISHING CHARACTERISTICS:

The Maintenance Specialist is distinguished from the Maintenance Technician by the depth and breadth of specialized experience and primary responsibility for performing complex maintenance tasks within a specialized field. Provides oversight and acts as a lead worker in planning and distributing work to assigned staff. This classification focuses on projects of considerable variety and complexity with a high level of responsibility for public health or level of public or cross departmental and public interaction. Requires the highest level of technical expertise in electrical, electronics, mechanical, pneumatics or hydraulic fields. This specialized technical skill is utilized to provide oversight of the preventive and corrective maintenance for the assigned area and to perform advanced troubleshooting and repair of equipment. Must have full working knowledge of City and Departmental policies and procedures, and recognized state and national standards. Vacancies in this classification will be filled through a competitive selection process.

SUPERVISORY RELATIONSHIPS:

Reports to and receives work assignments from a Maintenance Supervisor or Manager. Works independently under general supervision. Acts as lead worker in assigning work, providing direction and guidance as needed for Maintenance Technicians and other lower classified staff as assigned.

ESSENTIAL FUNCTIONS:

1. Performs complex troubleshooting, preventative, corrective and special project maintenance on industrial electrical, electronic, and mechanical equipment, systems and facilities.

2. Implements and maintains a comprehensive preventive maintenance management system for the mechanical, electrical, electronic, hydraulic, pneumatic and instrumentation equipment in City facilities. Recommends modifications and updates of the maintenance management system to supervisor.

3. Acts as lead worker in organizing work, prioritizing tasks and assigning duties to other employees of the section. Provides day to day direction and guidance to Maintenance Technicians and other lower classified staff as needed.

4. Provides on-the-job training for Maintenance Technicians and other lower classified staff in safe and efficient maintenance techniques and specialized skills as needed. Ensures work methods comply with recognized City, state, and national standards.

5. Performs programming of programmable logic controllers, maintenance of complex communications and computer based SCADA systems, program troubleshooting and modifications to existing programs as needed.

6. Prepares maintenance records related to daily activities.

7. Works laterally with other Maintenance Specialists to coordinate work when the task requires multiple skills.

8. Contacts other departments, vendors, and outside agencies to gather information regarding equipment, acquisition, and support services as necessary. Assists contractors when needed with system information and coordination of new system installations.

ADDITIONAL WORK PERFORMED:

1. Performs all duties of a maintenance technician or maintenance worker as required.

2. Fills in and acts as lead for other Maintenance Specialists as needed.

3. Performs other duties within the scope of the classification.

KNOWLEDGE AND SKILLS:

- Knowledge and good understanding of precision measuring instruments such as micrometers, precision pressure/vacuum gauges, tachometers, manometers, etc.
- Knowledge and good understanding of the relationships between various mechanical, hydraulic and pneumatic equipment components within a plant process.
- Knowledge and good understanding of all types of pumps, valves, fittings and accessories.
- Knowledge of cross connection control principles (training provided).
- Working knowledge of the National Electric Code and its application.
- Knowledge in operation of electrical test equipment such as digital and analog volt/ohm meters, oscilloscope, pulse/frequency counter, current/volt generators, logic probes, etc.
- Knowledge of instrumentation theory and process control application.

- Knowledge and understanding of current source and pulse width modulated variable frequency drives.
- Knowledge and understanding in theory and operation of DC and AC motors from fractional horsepower to 500 horsepower.
- Knowledge of electrical generation.
- Working knowledge of CMMS systems including the ability to produce reports, schedule work, organize spare parts, convert information to Excel and provide feedback for asset management or facilities management program.
- Ability to understand, program and troubleshoot the logic in a variety of sizes and types of programmable logic controllers, communications and SCADA systems.
- Ability to read, understand and interpret to others, information in complex technical manuals.
- Ability to draw, read, understand and interpret to others, information on complex drawings, blueprints and schematics
- Ability to quickly analyze, diagnose, troubleshoot and correct faults in various types of mechanical and electrical equipments.
- Ability to evaluate existing equipment and determine most efficient repair or replacement procedure. Ability to evaluate new or replacement equipment for most efficient life cycle.
- Ability to perform basic math and algebraic calculations as related to hydraulic theory and chemical dosage applications.
- Ability to follow established safety rules and regulations, and be able to independently recognize and rectify hazardous safety situations.
- Ability to work independently as well as part of a work crew.
- Good skills in leadership, planning and organizing, problem analysis and decision making, interpersonal sensitivity, time management, and ability to resolve minor conflicts.
- Good communication skills to interact effectively with people at all levels of the organization, coworkers, vendors; and ability to communicate technical information in a clear manner.
- Ability to evaluate technical skills of less experienced workers and to provide training and guidance for skill development.
- Ability to maintain records accurately and legibly.
- Willingness to accept "on call" status for equipment failures.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Physical requirements of the job include:
    - Ability to perform heavy physical work including the ability to infrequently lift and carry approximately 50 lbs., and very infrequently approximately 70 lbs.
    - Correctable vision suitable for working on small parts, distinguishing between color coded electronic parts, and viewing a computer terminal.
    - Sufficient manual and finger dexterity to work with small parts.
    - Adequate hearing to effectively hear telephone and radio conversations.

WORKING ENVIRONMENT:

Work is performed indoors at a computer workstation, as well as outdoors in all weather conditions in an industrial plant environment and other City facilities. The work is in a high-risk environment which requires special safety precautions, i.e., working around high speed, high horsepower, and high voltage rotating equipment; with irritant chemicals; and with exposure to raw sewage. Employees may be required to use protective clothing such as coveralls, rain gear,

masks, boots, goggles, gloves, shields, respirator, or other equipment. The person in this position independently lifts and handles a variety of moderately heavy components and may be required to work weekends, Saturdays, holidays, or emergency shifts.

EXPERIENCE AND TRAINING REQUIREMENTS:

- Requires high school diploma or equivalent AND
- Successful completion of two years post-secondary education/training in the full-range of industrial related mechanical maintenance, hydraulics, pneumatics, electrical, electronics, process control instrumentation, or closely related vocational areas. Structured coursework may be completed through programs at military training centers, community college, technical or trade school, apprenticeship, or other City-approved institutions.
  AND
- Six years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment or campus wide facilities maintenance and operations environment. Experience must reflect independent work in one or more of the following disciplines depending upon area of assignment: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, pipe fitter/plumber, HVAC, SCADA or Building Automation.
  OR
- Eight years technical maintenance experience with fault analysis, preventative and corrective maintenance in a continuous process industrial environment or campus wide facilities maintenance and operations environment. Experience must reflect independent work in one or more of the following disciplines depending upon area of assignment: electrician, process control technician, electronics technician, machinist, millwright, industrial plant maintenance mechanic, pipe fitter/plumber, HVAC, SCADA or Building Automation.
  AND
- 18 CEU's of City-approved maintenance classes within two years of hire.

- Completion of specialized leadership training program offered by the APWA Public Works institute or similar leadership program offered through military training centers, community colleges, technical or trade schools or other City-approved institutions preferred.
- One year maintenance supervisory or lead experience preferred.
- Experience working with a computer based maintenance management system is preferred.

NECESSARY SPECIAL REQUIREMENTS:

- Ability to obtain and maintain a valid Washington State driver's license during length of employment.
- Must obtain and maintain First Aid Card within one year of employment.
- Must obtain and maintain Fork Lift Operator's card within one year of employment.
- Must be able to report for emergency call-out within twenty (20) minute response time. Holiday, emergency, and weekend work may be required.
- Employment contingent upon passing a criminal conviction and local background check.

PREPARED BY: A. Sullivan
8/17

APPROVED BY:
Eric Johnston, Asst. Director
Public Works/Operations

COMMISSION ADOPTION: August 8, 2018