

City of Bellingham
Classification Specification - Civil Service or AFSCME

CLASS TITLE	Senior Surface Water Technician
DEPARTMENT	Public Works\Engineering
UNION:	114
SG:	14
CS:	Entry/Promotional
FLSA:	Y
EE04CODE:	TE

NATURE OF WORK:

Performs duties associated with the City's storm and surface water utility, including maintaining stormwater billing systems, updating and analyzing Geographic Information Systems (GIS) features of the City's stormwater systems, assisting with the development of standards, and providing stormwater information to internal and external clients.

DISTINGUISHING CHARACTERISTICS:

This class parallels the training and experience requirements of the Senior GIS Technician classification. It is distinguished from the general class by the requirement for greater technical training and specialized engineering experience in surface and storm water systems.

SUPERVISORY RELATIONSHIPS:

Reports to the Storm and Surface Water Utility Manager who assigns and reviews the work. Works independently under general supervision and the guidance of established procedures, standards and practices, applicable City regulations policies and guidelines and appropriate technical mapping and data collection standards. Also receives work direction from other departmental staff members..

ESSENTIAL FUNCTIONS:

1. Provides accurate and timely updates to the City's stormwater utility billing system. Uses GIS and other information sources to calculate impervious surface area and determine stormwater utility fees. Analyzes data and coordinates with other City departments to ensure accuracy and integrity of stormwater utility billing. Ensures that rate changes are correctly integrated into billing databases.
2. Performs analysis on Citywide GIS stormwater system and land use data to output spatial and tabular data sets, maps and reports to meet the dynamic needs of the Stormwater utility billing system and to support the City's National Pollution Discharge Elimination System permit. Performs analysis on data provided by other working groups within the department to develop and maintain information related to GIS stormwater data and provide information using maps, graphs and statistics and custom reports.

3. Leads and implements projects and maintains data related to stormwater utility billing, stormwater facilities and stormwater inspections.
4. Responds to customer inquiries regarding stormwater billing. Monitors and addresses stormwater complaints and stormwater illicit discharge reports via the City's stormwater hotline and online reporting engine. Refers call-outs to responsible staff within the Public Works Department..
5. Uses spatial/tabular stormwater data and technical knowledge of stormwater facilities to provide information to the public and to City personnel to support operational decisions. Utilizes the GIS, AutoCAD and a variety of database applications to provide custom mapping solutions that meet multi-department needs.
6. Initiates contact with City personnel, private utilities, engineering firms and the public to verify infrastructure and utility information, resolve data management problems and ensure accuracy of GIS mapping and infrastructure data related to stormwater systems.
7. Performs regular updates to the City's stormwater utility infrastructure GIS feature classes by interpreting plans, legal descriptions, aerial photos and record drawings. Updates flood inundation maps and tracks flood certifications. Provides GIS service and support for FEMA flood management.
8. Assists in determining stormwater system data collection needs and tracks maintenance actions for approximately 50 different types of stormwater facilities. Assists in the development of stormwater utility data collection standards, mapping procedures and schedules to ensure uniformity and compatibility between the utility management systems and the GIS.
9. Performs quality control on a wide variety of stormwater utility data by developing, running and reviewing quality control reports on spatial integrity and attribute consistency. Performs quality control checks between GIS datasets and other department business systems such as maintenance management, utility modeling, utility billing, customer service, project tracking and infrastructure inspection systems to ensure integrated system data consistency. Corrects errors and omissions.
10. Assists in the development of guidelines and standards for the storm and surface water utility; prepares technical letters and assists in compiling technical manuals and reports; makes recommendations regarding specific drainage problems; assists design engineers with storm and surface water issues.
11. Maintains and updates data to support the City's application of the Western Washington Hydrologic Model. Uses model to analyze the City's stormwater system.

ADDITIONAL WORK PERFORMED:

1. Provides training to City employees regarding data collection and GIS utilization. Informs and trains staff members about the City's stormwater data system.

2. Assists Senior GIS Technicians and utility billing staff with GIS mapping and data analysis as needed.
3. Prepares presentation ready information using appropriate mapping elements and media output. Creates maps, map books, graphs and publications using GIS, presentation software and related resources.
4. Performs related duties within the scope of the classification.

PERFORMANCE REQUIREMENTS (KNOWLEDGE, SKILLS AND ABILITIES):

Knowledge of:

- Geographic Information Systems
Cartographic principles, terms, concepts, procedures, and geoprocessing functions and techniques.
- Civil engineering, mapping and surveying principles, terms, concepts, techniques and procedures.
- Storm and surface water engineering practices, methods and standards
- Engineering-related computer applications and programs.
- Applicable local, state and federal laws and standards related to storm and surface water management.
- Public works and engineering data and records management systems and practices.

Skills in:

- Strong analytical and problem solving skills.
- Good oral and written communication, problem solving, and ability to learn.
- Ability to work independently with a minimum of supervision.
- Ability to produce and maintain computer generated maps and other graphic presentations.
- Ability to establish and maintain effective working relationships with diverse groups of people such as contractors, engineers, developers, public officials and the general public.

Ability to:

- Maintain records and prepare necessary technical reports.
- Operate database and reporting applications.
- Work independently and as part of a team.
- Maintain reliable and punctual attendance.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Physical ability to perform essential functions of the job including:
 - Adequate hearing, correctable vision, and manual dexterity.
 - Ability to occasionally lift light weight (10-15 lbs.)
 - Ability work in all weather conditions for extended periods of time.

WORKING ENVIRONMENT:

Work is performed in an office setting and requires working for extended periods of time in front of a computer terminal. May also perform field work outdoors on uneven terrain, exposing the employee to inclement weather, noise, fumes, construction environment and traffic hazards. Employees are required to use appropriate safety equipment and follow standard safety practices.

EXPERIENCE AND TRAINING REQUIREMENTS:

- An Associate's Degree in technical engineering, GIS technology or other relevant degree that includes coursework in surveying cartography and GIS theory and applications.
- Four years technical engineering experience involving surface water systems.
- Four years GIS mapping experience.
- Additional coursework in hydraulics/hydrology, environmental science, or related area preferred.
- A combination of education and experience that provides the applicant with required knowledge, skills and abilities will be considered.

NECESSARY SPECIAL REQUIREMENT:

- Valid Washington State driver's license and good driving record. A three-year driving abstract must be submitted prior to hire.
- Employment contingent upon passing a criminal conviction and local background check.

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COMMISSION ADOPTION:

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