

# **SNOHOMISH COUNTY JOB DESCRIPTION**

## **ENGINEERING TECHNICIAN IV**

Spec No. 3056

### **BASIC FUNCTION**

Assist engineers to manage public works projects or traffic operations; or to oversee the construction or right-of-use inspection of smaller projects or project components. To perform journey level survey assignments and preliminary draftings.

### **STATEMENT OF ESSENTIAL JOB DUTIES**

1. Serves as construction manager of small construction projects, or assists engineers on larger projects; monitors project budget and the quality, quantity and testing of materials used. Prepare project documentation and assures project compliance with plans, specifications, easements, legal boundaries and safety requirements.
2. Operates survey equipment such as the Odolite, total station, data collector, automatic level and magnetic locator; assists party chief in making and checking required calculations; records field notes; reads, analyzes and checks construction plans for errors.
3. Performs duties related to the operation of the Global Positioning System (G.P.S.) Survey group which include: independent operation of G.P.S. receiver, field reconnaissance, data downloading, and database management.
4. Serves as land development and right-of-way use inspector for a portion of the county; makes field reviews during plan review stage and recommends modifications; inspects all projects within designated geographical area to assure compliance with county codes; maintains project records and coordinates resolution of project problems and disputes with developers, contractors or the public.
5. Oversees and performs the testing of a variety of soils and construction materials conducted in the materials testing lab; prepares related calculations and reports.
6. Conducts field tests of materials used in construction and inspects concrete and asphalt plants prior to material use; prepares field calculations and soil log reports.
7. Coordinates and performs the drafting of plans, layouts and location, and calculation sheets for right-of-way acquisition and construction of road, bridge and solid waste site improvements; and drafting of exhibits and displays for public meetings.
8. Assist property owners participating in river improvement program to protect property from flooding and erosion; provides information on materials and permits needed and inspects contractors work.
9. Calculates and verifies calculations of quantities, acreage and right-of-way acquisitions for design engineers.

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### STATEMENT OF ESSENTIAL JOB DUTIES (Continued)

10. Schedules, coordinates and performs the collection and maintenance of traffic engineering data necessary for highway capacity studies, accident analyses, speed zones and traffic safety improvement projects; compiles data and prepares reports with recommendation.
11. Reviews and approves drainage plans required for land development and right-of-way use projects within the county such as plats, segregation's, commercial buildings, grading, and conditional use.
12. Performs drainage studies and technical hydrological and hydraulic calculations to solve drainage problems throughout the county.
13. Identifies, analyzes and recommends drainage plans for critical areas, protective measures for wetlands, and input to the state on dam safety and water quality criteria.
14. Advises engineers, developers, contractors, surveyors and the general public of project requirements.
15. Assists lead bridge inspector or engineer with bridge inspection program including: planning of inspections, field inspection of bridges, reporting findings in accordance with current standards, identifying repairs, maintaining bridge inspection files and preparing work requests.

### STATEMENT OF OTHER JOB DUTIES

16. Performs other duties as assigned.

### MINIMUM QUALIFICATIONS

Graduation from a two-year accredited program in civil engineering technology and two (2) years of field or office experience in civil engineering; OR, any equivalent combination of education and experience which provides the skills, knowledge and ability necessary to perform the work. Must pass job related tests.

### SPECIAL REQUIREMENTS

A valid Washington State Driver's License is required for employment.

Technical certification or license may be required for some positions.

Successful completion of a FHWA approved Comprehensive Bridge Inspection training course is required within one year of employment when assigned to the Bridge Inspection Team.

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### KNOWLEDGE AND ABILITIES

Knowledge of:

- principles and practices of engineering and surveying
- principles, practices, techniques and instruments related to area of assignment
- mathematics, algebra, geometry, and trigonometry; codes, regulations and standards applicable to area of assignment; current literature, trends, materials and issues in the area of specialization

Ability to:

- interpret engineering plans and specifications
- use and maintain instruments and equipment used in area of assignment
- communicate effectively with engineers, contractors, developers, staff members and the general public
- work independently and organize workload
- lead, train, and review the work of other employees
- prepare complex technical calculations necessary for design and review of construction projects
- independently perform detailed drafting, surveying inspection or related technical engineering assignment

### SUPERVISION

Employees report to a technical or professional supervisor as assigned. Employee may serve as a lead worker and be responsible for coordinating the work of other employees. Work is performed independently or as a member of a crew. Work is reviewed in progress or upon completion for accuracy and adherence to division engineering standards.

### WORKING CONDITIONS

Work is performed in the office or in the field in varying weather conditions. Physical hazard from traffic and construction equipment at the work site may be present. Physical exertion may be required to lift equipment in excess of fifty (50) pounds.

Snohomish County is an Equal Employment Opportunity (EEO) employer.  
Accommodations for individuals with disabilities are provided upon request.

[EEO policy and ADA notice](#)

Class Established: 1980

Previous Spec No. 420403

Revised: March 1986, April 1992, March 2018, April 2019

EEO Category: 3 - Technicians

Pay Grade: 238 - Classified Pay Plan

Worker's Comp: 1501 Hazardous