

# **SNOHOMISH COUNTY JOB DESCRIPTION**

## **ENGINEERING TECHNICIAN V - CONSTRUCTION**

Spec No. 3293

### **BASIC FUNCTION**

Performs advanced project construction engineering and inspection to assure conformance with plans and specifications, including applicable guidelines and regulatory requirements. Manages construction project documentation, performs construction surveying, and other related technical engineering assignments.

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

1. Serves as independent project construction engineer on smaller construction projects, or assists higher responsibility level project construction engineers by managing entire features or segments of larger, more complex projects; may serve as independent project construction engineer on smaller projects being accomplished by county in-house maintenance crews, including such associated elements as less specific design documents and crew lead aspects.
2. Monitors construction contractor's progress and prepares records and reports to document and track project costs, schedules, quality assurance tests and materials approvals.
3. Develops budgets, and projections for portions of larger projects, or complete budgets for smaller projects; oversees budgets and expenditures during construction, maintaining daily log books to track costs, and using spreadsheets to report.
4. Coordinates project implementation with a myriad of interest agencies and groups, to include other Public Works sections, other county departments, cities, school districts, fire and emergency services, utilities, state transportation, county council and the general public.
5. Coordinates materials testing with lab and/or performs materials tests for soils, asphalt, concrete and other items including identification and chain of custody documentation; inspects concrete and asphalt plans prior to materials use.
6. Operates precise technical surveying instruments, as well as traditional transit and level, while performing layout and construction surveying including vertical and horizontal location of project features including slope staking, topographic and location survey for field design changes, asbuilt location and confirmation of other survey on critical features.
7. Prepares inspection reports and project documentation for pay quantities and estimates, progress tracking, quality assurance, and claims avoidance. To include field notes, drafting and calculating quantities, alignment, grade and locations, and other tasks, according to contract documents.

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### **ENGINEERING TECHNICIAN V - CONSTRUCTION**

Spec No. 3293

#### **STATEMENT OF ESSENTIAL JOB DUTIES** (Continued)

8. May conduct field change order negotiations, and/or prepare and track change order documentation; prepares project correspondence and coordinates field design changes.
9. Identifies construction problems, determines alternatives, and presents recommendations to project supervisor for resolution.
10. Provides technical support to engineers for design of road, bridge, surface water and solid waste projects including field reconnaissance and verification, drafting of plans, layouts and location, calculation sheets for design and right-of-way acquisition, quantity take off and estimates, design details, specifications and contract document packages and review of designs at various stages of completion.
11. Coordinates and reviews the work of other engineering staff as it relates to assigned construction projects; provides training in related work as required.
12. Provides training and orientation to peer and lower level employees; may serve as lead for such employees on a limited time or job segment basis.
13. Monitor changes and additions to current regulations relating to area of specialization. Provide guidance and direction to staff to comply with new and current regulations and procedures as required.

#### **STATEMENT OF OTHER JOB DUTIES**

14. Performs related duties as required.

#### **MINIMUM QUALIFICATIONS**

Graduation from a two (2) year accredited program in civil engineering, engineering technology or related field; AND three (3) years of experience in civil engineering, construction management, construction inspection or related field; OR, a four (4) year degree in civil engineering, construction management or related field; AND one (1) year of related experience; OR, any equivalent combination of education and experience which provides the knowledge and abilities necessary to perform the work. Must pass job related tests.

#### **SPECIAL REQUIREMENTS**

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

**SNOHOMISH COUNTY JOB DESCRIPTION**  
**ENGINEERING TECHNICIAN V - CONSTRUCTION**

Spec No. 3293

**KNOWLEDGE AND ABILITIES**

Knowledge of:

- effective communication skills including styles, listening, negotiating and decision making in interpersonal and team situations
- principles and practices of engineering, construction and surveying
- mathematics, algebra, geometry, and trigonometry; codes, regulations and applicable construction standards
- current literature, trends, materials and issues in construction

Ability to:

- communicate effectively orally and in writing and be clearly understood in by the construction group's client group of engineers, contractors, developers, the general public, and county staff members
- understand and interpret engineering plans, specifications and construction processes
- independently perform document management, detailed drafting, surveying, inspection or related technical engineering assignments
- demonstrated and use engineering and interpersonal judgment commensurate with the work assigned within the responsibility level of this specification
- use and maintain instruments and equipment used in area of assignment including drafting, programmable calculator, computer, transit, level, rod chain, etc.
- organize workload and work both independently and in a team environment
- prepare clear and concise written reports
- lead, train, and review the work of other employees
- prepare complex technical calculations necessary for design and review of construction projects
- work effectively as a team member

**PHYSICAL REQUIREMENT**

Physical exertion required to lift equipment in excess of fifty (50) pounds.

**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 team. Work is reviewed in progress or upon completion for accuracy and adherence to division engineering standards.

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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.

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: July 1999  
Revised: July 2005, May 2018  
EEO Category: 3 - Technicians  
Pay Grade: 239 - Classified Pay Plan  
Workers Comp: 1501 Hazardous