

# **ENGINEERING TECHNICIAN, SENIOR**

## **JOB PURPOSE AND SUMMARY**

Performs responsible office and field engineering duties within the Departments of Community Development and Public Works. Assignments and duties may include surveying, construction inspection, materials laboratory, water quality programs, bridge inspection, maintenance of Geographic Information Systems (GIS), development engineering, and transportation management. Provides support for department engineers by performing calculations, information gathering, and record keeping. Acts as a lead person over other engineering technicians and related support staff.

## **CLASSIFICATION DISTINCTIONS**

This is the highest level position in the Engineering Technician job family. Incumbents perform the most complex or advanced activities with little supervision, and serve as lead supervisors over other technicians and engineering support personnel. The two lower levels in the job family are the Engineering Technician and Assistant Engineering Technician positions. The Engineering Technician is the journey or fully experienced level performing the full range of skilled and semi-professional duties under general supervision. The next lower level, Assistant Engineering Technician, is the entry level for inexperienced technicians.

## **KEY OR TYPICAL TASKS AND RESPONSIBILITIES:**

- Represents the County on construction projects, both with contractors and general public.
- Closely monitor one or more specialized projects to ensure that timelines and quality standards are met
- Lead and direct support staff to ensure quality of work and that department productivity goals and standards are met.
- Inspects construction work on complex projects for developing and improving roads, bridges drainage structures and traffic control devices.
- Computes and tracks cuts, fills and quantities on construction projects
- Completes daily inspection reports
- Responds to inquiries and complaints from property owners, businesses and the general public regarding engineering projects
- Acts as a liaison for residents affected by projects
- Reviews project plans and archives data from projects
- Performs tests on materials for quality, strength, compaction, and other related criteria
- Collects and maintains base data for engineering studies
- Performs research activities in County and State records
- Assists engineers in field water quality/quantity monitoring
- Leads survey team in location surveys

- Reviews engineering plans for compliance with County Codes
- Collects water samples for delivery to labs for testing
- Read and interpret plans and specifications to ensure that projects are built to contract standards
- Coordinates work between developers and public agencies

### **QUALIFICATIONS**

- An Associate of Science Degree in Engineering Technology (or equivalent experience) and at least 3 years experience in a position equivalent to an Engineering Technician, preferably in construction inspection or in a civil engineering role. A Bachelors Degree in Civil Engineering or related field may be substituted for the required educational experience.

**Knowledge of....**basic engineering principles, practices, the techniques and equipment involved, physical and mathematical sciences (trigonometry and geometry), basic construction practices and safety requirements, WSDOT construction procedures and specifications, storm water and transportation construction methods.

**Ability to....**interpret construction plans and specifications, use a personal computer, interact with the public and/or contractors, operate basic surveying and test equipment, lead and direct support staff, perform technical research work on routine engineering problems, analyze data and provide professional opinion based on solid engineering principles to a variety of internal and external contacts, communicate professionally both orally and in writing; understand department policies and procedures as well as work standards and codes applicable to the job.

### **WORK ENVIRONMENT & PHYSICAL DEMANDS:**

Incumbents are required to work both in an office setting and outdoors with exposure to inclement weather conditions, construction sites, and heavy equipment with exposure to dust and noise. Subject to working long hours, weekends and evenings.

Essential tasks include use of the telephone, personal computers, office equipment, writing, driving a county or personal vehicle to travel to various work sites. Must be able to effectively communicate to a wide variety of individuals both formally and informally to include over-the-phone and face-to-face exchanges, must be able to read and interpret construction plans and specifications. Must be able to lift up to 50 lbs.

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