

# **CITY OF ANACORTES**

Position Description

1/1/98

**JOB TITLE:** Engineering Tech II

**DEPARTMENT:** Engineering and Development Services

**REPORTS TO:** Staff Engineer

**PRINCIPAL PURPOSE OF JOB:** Performs moderately complex drafting or survey engineering tasks requiring the use of standard manual and computer drafting or survey instruments. Plans and organizes projects for establishing, improving, maintaining and disseminating records, maps and sketches of utilities, streets and other public works. Assists other employees in a variety of activities, including preliminary design preparation, local improvement district applications, field surveying,

**LEVEL OF AUTHORITY:** Performs regular and recurring drafting, designing and surveying duties within general departmental policies and procedures under general and infrequent supervision. Work assignments are usually specific in scope and periodically checked for accuracy and compliance with time schedules and applicable regulations.

**WORK ENVIRONMENT:** Approximately 80 percent of the work is performed indoors, with the remainder performed outdoors in all kinds of weather and on all kinds of terrain.

## **ESSENTIAL JOB FUNCTIONS**

1. As directed and under intermittent supervision, perform layout drafting requiring reduction of field notes and the application of survey information in formulating preliminary and detailed designs and drawings for various engineering and planning projects. Includes base mapping, overlay preparation, storm sewers, sanitary sewers, water mains, street designs, site plans, presentation layouts and publication mock-ups.
2. Perform research of ownership, legal descriptions or other such data needed to complete information required in preparation for construction projects and local improvement district (LID) formation and projects requiring latecomer agreements. Obtain easements and deeds and make required contacts with property owners for signatures.
3. Research records, maps and other sources to check plats and obtain engineering data such as location of sewer stubs and water mains, LID assessments and zoning.
4. Answer questions from public regarding property descriptions, utility locations and related information within scope of knowledge and refer to employee of higher classification as appropriate.
5. On survey assignments, serve as rod handler or recorder.

6. Measure distances and elevations to establish vertical control through skilled use of survey chain, level and related survey equipment.
7. Draft maps and plats using computers and programs such as AutoCAD. Assemble and manipulate data bases for records and information.
8. Collect traffic and flow data and generate a variety of computer reports.
9. Compile field notes, complete preliminary drawings, plot plans and profile elevations and improvement of sewers, streets, water mains and related public works and utility projects.
10. Draw maps from aerial photographs and sketches. Maintain accurate files.
11. Perform a variety of related office and field tasks to gather, analyze and record data and otherwise assist City of staff engineer in preparation of bid specifications or construction design.
12. Maintain close working relationships with other City departments and governmental agencies.
13. Review plans and specifications for their completeness and accuracy and for compliance with City standards.
14. Make recommendations to the city or staff engineer for field changes on construction projects.
15. Perform field measurements as required for design, construction and payments, testing and analysis. Process permit applications for such things as open street cuts, sidewalk and curb cuts and other work as assigned by the City or staff engineer.
16. Locate and verify accurate placement of new water mains, sewers and valve locations. Record survey results in field book and plot on City map.

#### **ADDITIONAL JOB FUNCTIONS**

1. May act as liaison between contractors, developers and the general public in respect to various public works projects.
2. May perform portions of the work of higher classified positions occasionally, as assigned.
3. May perform duties of similar complexity in any City department as required or assigned.
4. May inspect public works projects.

## **QUALIFICATIONS AND CAPABILITIES**

### Technical

1. Must have a minimum of three years experience as an engineering technician or comparable job.
2. Must have at least two years of pre-engineering or related course work in vocational school or college, or equivalent knowledge gained through experience.
3. Must have knowledge of both manual and computer drafting as related to construction and public works projects. Must be able to use AutoCAD and related programs.
4. Must have ability to use algebraic formulas, trigonometry tables and statistical mathematics.
5. Must have a working knowledge of engineering construction terms and methods and the ability to interpret and communicate engineering plans and specifications.
6. Must have knowledge and experience with surveying methods.
7. Must have a valid WA state driver's license.
8. Must be able to acquire and maintain certification as a flagger.
9. Must be able to acquire and maintain a first aid/CPR card.

### Physical

1. Must have physical strength and ability to lift up to 60 pounds and carry such weight for approximately 200 feet and to sustain such activity intermittently throughout a day.
2. Must be able to navigate uneven ground in all weather and soil conditions over hilly terrain with obstacles.
3. Must be capable of clearing trails through woods and underbrush.
4. Must have average visual ability for both distance and close-up observations and to use optical survey instruments.
5. Must have good depth perception and ability to distinguish color differentials.
6. Must have hearing sufficient, for example, to hear cars, verbal signals at a moderate distance and to communicate by two-way radio.

### Other

1. Must have reading ability sufficient to read manuals, trade magazines and other technical materials such as ordinances and codes.

2. Must have writing ability sufficient to write correspondence and legal descriptions.
3. Must have good communication skills to deal with the public and to work cooperatively with other City employees.

Use of Tools

Ability to use all tools for manual and computer drafting and all survey instruments; also must use various hand tools, such as machete, ax, pry bars, hammer and manhole lifters.

**OTHER**

1. As an absolute condition of employment, employees are required upon hire to sign a drug-free workplace agreement and an agreement not to use tobacco products of any kind while on the job.
2. The statements contained in this job description reflect general details as necessary to describe the principal functions of this job, the level of knowledge and skill typically required and the scope of responsibility. It should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absences of relief, to equalize peak work periods or otherwise to balance the work load.

**Are you able to perform the essential functions of this job with or without accommodation?**

Yes \_\_\_ No \_\_\_

**If testing is required, will accommodation be necessary?**

Yes \_\_\_ No \_\_\_

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**