# MONTGOMERY COUNTY GOVERNMENT ROCKVILLE, MARYLAND CLASS SPECIFICATION

Code No. 004062 Grade 13

#### SURVEY INSTRUMENT AIDE

### **DEFINITION OF CLASS:**

This is skilled technical work performing various duties to assist in surveying land. Contacts are primarily with co-workers for the purpose of exchanging information. An incumbent in this class offers limited direct service or assistance to the public.

An employee in this class performs a number of duties to assist in survey work such as: holding the level rod at designated points to assist in determining elevations; measuring distance between survey points using steel or cloth tape or surveyor's chain; marking points of measurement; calling out readings; directing traffic around the work site; and clearing brush which is in the line of vision. Work is performed under the direction of the crew leader and/or instrument person. Guidelines consist of survey principles and practices; equipment operating procedures and specifications; Federal, State and County regulations; and Department procedures. An employee chooses the proper procedure from among several alternatives. The complexity of the work is characterized by decisions the employee makes concerning proper survey techniques, such as placement of the rod, based upon training and prior experience. The work effort contributes to the accuracy of right-of-way design, construction stake-out and property boundaries. The work of this class is conducted outdoors in all types of weather. An employee is exposed to some risks such as vehicular traffic, noise and exhaust fumes, and working around open trenches and construction areas which involve the use of safety equipment such as reflective vests and safety shoes. The work involves some physical effort such as walking over rough terrain; frequent bending, crouching and stooping; occasional lifting of objects up to 50 pounds; and infrequent precise use of hand or fingers to operate survey equipment.

# **EXAMPLES OF DUTIES: (Illustrative Only)**

- Holds level rod at designated points to assist in determining elevations and laying out stakes for construction
- Measures distance between survey points, using steel or cloth tape or surveyor's chain.
- Marks measuring points with marking crayon, paint, scratches, tacks or stakes.
- Places stakes at designated points and drives them into the ground at specified elevation.
- May call out reading or write station number and reading in notebook.
- Learns operation of survey instruments and may operate instruments when instrument technician is absent.
- May perform mathematical calculations in the field when required to take measurements.
- Cuts and clears brush and trees from line of survey.
- Directs traffic around work site.
- Performs related duties as required.

### KNOWLEDGE, SKILLS AND ABILITIES:

• Knowledge of the methods, equipment and techniques of land surveying.

- Knowledge of mathematics necessary to perform calculations for measurements in the field.
- Ability to acquire skill in the precise calibration, operation and maintenance of survey instruments such as transit, level, theodolites and electronic distance measuring devices.
- Ability to keep accurate notes of field measurements and calculations and to make accurate diagrams in the field.
- Ability to follow directions and to convey information to others in English.
- Ability to perform field work in environments that present moderate discomforts and risks and require some physical exertion.

## **MINIMUM QUALIFICATIONS:**

**Experience:** One (1) year of experience on a survey crew, specifically involving holding a level rod and making measurements with tape or chain.

**Education:** Completion of high school or High School Certificate of completion recognized in the State of Maryland.

**Equivalency:** An equivalent combination of education and experience may be substituted.

**Physical Abilities:** Requires physical effort such as walking over rough terrain; frequent bending, crouching and stooping; occasional lifting of objects up to 50 pounds; and infrequent precise use of hand or fingers to operate survey equipment.

#### LICENSE:

• Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence when required for job-related duties.

# **PROBATIONARY PERIOD:**

Individuals appointed to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

**MEDICAL EXAM PROTOCOL**: Core II Exam.

Class Created: August, 1992 (M)

**Revised:** April, 2010 August, 2013