

Class Title: Instrument Technician

BRIEF DESCRIPTION OF THE CLASSIFICATION:

Operates surveying equipment and obtains data pertaining to lines, corners, elevation, grades, curves, alignments, and positions and maintains records of this information. Utilizes the Global Positioning System to collect utility assets. Gathers data on utility assets in preparation for design efforts before and after construction. Obtains survey calculations. Maintains records.

ESSENTIAL FUNCTIONS:

This information is intended to be descriptive of the key responsibilities of the classification. The following examples do not identify all duties performed by any single incumbent. Specific requirements of individual positions are described in the Job Description.

Physical Strength Code		ESSENTIAL FUNCTIONS
1	M	Utilizes the Global Positioning System and collects utility assets by setting up antennas to receive satellite transmissions, walking through neighborhoods with GPS to locate points and physical features and transferring points to the city map.
2	M	Gathers data on utility assets in preparation for design efforts before and after construction by using survey equipment and verifying plans and legal descriptions.
3	L	Obtains survey calculations by calculating temperature corrections, reducing slope distances and computing stadia distances, directions, and elevation
4	S	Maintains records by recording observations on the field table sheet, keeping other field readings and observations, indexing and filing survey notes, maps, and planning for survey party use.
5	M	Sets up and operates surveying instruments to measure data pertaining to lines, corners, levels, elevation, grades, curves, alignments, and positions. }

CSC Adopted: October 2001, CSC Revised: _____

CLASS REQUIREMENTS:

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Formal Education / Knowledge	Work requires knowledge necessary to understand basic operational, technical, or office processes. Level of knowledge equivalent to four years of high school or equivalency.
Experience	One year's experience.
Certifications and Other Requirements	Valid Driver's License may be required depending on assignment.
Reading	Work requires the ability to read the GPS data collector.
Math	Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division.
Writing	Work requires the ability to write reports and field notes.
Managerial	Managerial responsibilities include planning activities for collecting data.
Budget Responsibility	N/A
Supervisory / Organizational Control	Job has no responsibility for the direction or supervision of others.
Complexity	Work involves choices of action within limits set by standard practices and procedures. Professional judgment is required to apply the proper course of action.
Interpersonal / Human Relations Skills	Contacts others within the organization. These contacts may involve similar work units or departments within the City which may be involved in decision making or providing approval or decision making authority for purchases or projects.

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OVERALL PHYSICAL STRENGTH DEMANDS:

Sedentary	Light	Medium X	Heavy	Very Heavy
S = Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time	L = Light Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree.	M = Medium Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly.	H = Heavy Exerting 50-100 lbs. occasionally, 25-50 lbs. frequently, or up to 10-20 lbs. constantly.	VH = Very Heavy Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly.

PHYSICAL DEMANDS:

C = Continuously 2/3 or more of the time.	F = Frequently From 1/3 to 2/3 of the time.	O = Occasionally Up to 1/3 of the time.	R = Rarely Less than 1 hour per week.	N = Never Never occurs.
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This is a description of the way the job is currently performed; it does not address the potential for accommodation.

PHYSICAL DEMANDS	FREQUENCY CODE	DESCRIPTION
Standing	F	Collecting data
Sitting	R	Desk work, driving
Walking	O	Through neighborhoods collecting data
Lifting	O	Equipment and supplies
Carrying	O	Equipment and supplies
Pushing/Pulling	N	
Reaching	N	
Handling	N	
Fine Dexterity	O	Writing
Kneeling	O	Construction signs
Crouching	O	Construction signs
Crawling	N	
Bending	O	Construction signs
Twisting	N	
Climbing	N	
Balancing	N	
Vision	F	Reading, observing work duties, driving
Hearing	F	Communicating with personnel, listening to data collector
Talking	F	Communicating with personnel
Foot Controls	F	Driving
Other (specify)	N	

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MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

GPS equipment, computer, printer

ENVIRONMENTAL FACTORS:

D = Daily	W = Several Times Per Week	M = Several Times Per Month	S = Seasonally	N = Never
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HEALTH AND SAFETY		ENVIRONMENTAL FACTORS	
Mechanical Hazards	N	Dirt and Dust	D
Chemical Hazards	N	Extreme Temperatures	D
Electrical Hazards	N	Noise and Vibration	D
Fire Hazards	N	Fumes and Odors	D
Explosives	N	Wetness/Humidity	D
Communicable Diseases	N	Darkness or Poor Lighting	N
Physical Danger or Abuse	N		
Other (see 1 below)	N		

PRIMARY WORK LOCATION	
Office Environment	--
Warehouse	--
Shop	--
Vehicle	--
Outdoors	X
Other (see 2 below)	--

- (1)
- (2)

PROTECTIVE EQUIPMENT REQUIRED:

Safety vest, vehicle safety light bar

NON-PHYSICAL DEMANDS:

C = Continuously 2/3 or more of the time.	F = Frequently From 1/3 to 2/3 of the time.	O = Occasionally Up to 1/3 of the time.	R = Rarely Less than 1 hour per week.	N = Never Never occurs.
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NON-PHYSICAL DEMANDS	
Time Pressures	O
Emergency Situations	N
Frequent Change of Tasks	O
Irregular Work Schedule/Overtime	N
Performing Multiple Tasks Simultaneously	N
Working Closely with Others as Part of a Team	O
Tedious or Exacting Work	F
Noisy/Distracting Environment	F
Other (see 3 below)	N

- (3)