

Career Service Authority

Senior Engineering Aide

Revised Date 12/1/99
Revised By Patricia Anderson
FLSA Code 3 Technicians
Est. Date 9/16/95

General Statement of Duties

Performs standard performance sub-professional work assisting with a variety of engineering work including field surveys and site inspections and sampling of various liquids and materials.

Job Responsibilities and Knowledge, Skill, and Ability Requirements

1. Performs routine sub-professional work assisting with surveys and inspections and collecting a variety of samples to ensure compliance with governmental and environmental regulations, engineering, and/or construction specifications.
 - *Skill in establishing and maintaining effective working relationships with other employees and the public.*
 - *Skill in communicating and presenting factual information relative to the work assignment.*
2. Operates and programs a variety of measuring devices and determines what type of information is needed for collection and/or measurement.
 - *Skill interpreting and applying written guidelines, precedents, and work practices to standardized work situations or specific cases.*
3. Makes mathematical calculations as necessary to perform the duties of the work assignment.
 - *Skill in performing a variety of mathematical calculations.*
4. Interprets blueprints, maps, and drawing specifications as necessary to perform the duties of the work assignment.
 - *Skill in reading and interpreting blueprints and maps.*

- 5. Prepares and interprets reports and enters and retrieves information in a computer as needed.
 - *Skill in filling out forms and completing paperwork related to the work assignment.*
 - *Skill in using a computer to enter and retrieve information.*
 - *Skill interpreting and applying written guidelines, precedents, and work practices to standardized work situations or specific cases.*

- 6. Observes all common safety practices associated with the work assignment.
 - *Knowledge of common safety hazards and necessary safety precautions for self and others to maintain a safe work environment.*

- 7. Some positions may assist in training and checking the work of other employees on various projects.
 - *Knowledge of standard practices, policies, and procedures used sufficient to be able to perform the duties of the work assignment.*
 - *Skill in establishing and maintaining effective working relationships with other employees and the public.*
 - *Skill in communicating and presenting factual information relative to the work assignment.*

- 8. Performs other related duties as assigned or requested.

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Any one position may not include all of the duties listed. However, the allocation of positions to this class will be determined by the amount of time spent in performing the primary duties listed above.
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Job Requirements

Level of Supervision

May perform lead work over other employees.

Guidance and Decision Making

Guidelines are generally numerous, well established and directly applicable to the work assignment. Work assignment and desired results are explained by general oral or written instructions. Duties assigned are generally repetitive and restricted in scope but may be of substantial intricacy. Employee is primarily concerned with the

application of standardized practices. Decisions or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems which are not covered by guidelines or are without precedent are taken up with the supervisor. Work is reviewed for adherence to instructions, accuracy, completeness, and conformance to standard practice or precedent. Recurring work clearly covered by guidelines may or may not be reviewed.

Interpersonal Communications

Contacts with the public or employees where factual information relative to the organization or its functions is received and relayed, or a service rendered, according to established procedures or instructions.

Physical Demands

Standing: remaining on one's feet in an upright position.

Walking: moving about on foot.

Lifting: raising or lowering an object from one level to another.

Carrying: transporting an object, usually by hand, arm, or shoulder.

Pushing: exerting force upon an object so that the object is away.

Pulling: exerting force on an object so that it is moving to the person.

Climbing: ascending or descending objects usually with hands/feet.

Balancing: maintaining body equilibrium to prevent falling over.

Stooping: bending the body by bending spine at the waist.

Kneeling: bending legs to come to rest on one or both knees.

Crouching: bending body downward and forward by bending legs.

Reaching: extending the hand(s) and arm(s) in any direction.

Handling: seizing, holding, grasping, or otherwise working with hand(s)

Fingering: picking, pinching, or otherwise working with fingers.

Talking: expressing or exchanging ideas by means of spoken words.

Hearing: perceiving the nature of sounds by the ear.

Repetitive motions: making frequent movements with a part of the body.

Eye/hand/foot coordination: performing work through using two or more.

Physical Strength

Raising or lowering an object 25-50 pounds.

Vision Requirements

Far Acuity: ability to see clearly at 20 feet or more.
Near Acuity: ability to see clearly at 20 inches or less.
Depth Perception: ability to judge distance and space relationships.
Field of Vision: ability to see peripherally.
Accommodation: ability to adjust vision to bring objects into focus.

Mental Demands

Mathematical Reasoning
Memorization
Oral Comprehension
Spatial Orientation
Written Comprehension

Environmental Conditions

Noise: sufficient noise to cause distraction or possible hearing loss.
Hazards: conditions where there is danger to life, body, and/or health.
Atmospheric Conditions: conditions that affect the skin or respiratory system.
May be exposed to extremes of heat and cold in all weather conditions.
May come in contact with contaminated materials including radiation and hazardous waste.

Working Conditions

Subject to injury from moving parts of equipment.

Minimum Education

Graduation from high school or GED Certificate including or supplemented by completion of course work in Algebra and Geometry.

Minimum Experience

Two years of sub-professional engineering or sampling experience.

OR

Two years of sub professional engineering experience which must have included one year of experience on a survey crew.

Equivalency

Additional appropriate education may be substituted for one year of the minimum experience requirement.

Licensure and Certification

Possession of a valid Colorado Class "R" Driver's License at the time of application.