General Statement of Duties

Performs intermediate level professional engineering work on a variety of engineering assignments with emphasis placed upon the application of engineering mathematics, principles, and practices on all phase of routine/moderately difficult engineering projects/assignments.

Distinguishing Characteristics

This class performs intermediate level professional engineering work on a variety of engineering assignments. This class is distinguished from the Senior Engineer class that performs full performance professional engineering work on a variety of complex engineering assignments with emphasis placed upon the application of engineering mathematics, principles, and practices in all phases of major engineering projects/assignments. The Engineer class is also distinguished from the Staff Engineer that performs entry-level engineering work under close supervision while learning and assisting in the design, construction, and plans review processes in accordance with standard engineering practices.

Guidelines, Difficulty and Decision-Making Level

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 primarily applies standardized practices.

Decisions or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems that are not covered by guidelines or are without precedent are taken up with the supervisor.

Level of Supervision Received & Quality Review

Under general supervision, the employee receives assignments and is expected to carry them through to completion with substantial independence. 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 Communication & Purpose

Contacts with the public or employees where explanatory or interpretive information is exchanged, defended, and gathered and discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised

Coordinates the work of consultants/contractors.

By position, performs lead work or supervises technical staff.

Essential Duties

Performs intermediate level professional engineering work on a variety of routine engineering projects and assignments, which includes reviewing construction plans and designs for conformance and compliance, providing technical engineering support and guidance, coordinating project phases, and recommends solutions to routine engineering issues and problems.
Works with stakeholders both internal and external to the city, which includes attending neighborhood meetings, working with intergovernmental organizations, interacting with utility companies, other city agencies and departments, elected officials, and works with consultants and contractors.

Assists with and prepares project bid materials and cost estimates, which includes evaluating bid qualifications and proposals, and works with stakeholders on project designs, concepts, and timeframes for project completion.

Prepares project budgets in the planning and design phase, monitors project budgets and expenditures throughout construction, and ensures project deliverables stay on-time and target, ensures quality control, and the project stays on budget.

Performs project management work which includes monitoring overall construction and design, tracking project schedules, overseeing costs and expenses, ensuring compliance and conformance to engineering standards within contract specifications, and confers with management on risks, costs, and allocation of resources within the various phase of the project.

Participates in design and construction coordination meetings involving private development projects and city capital improvement projects to ensure timely approval and completion of projects.

Designs routine right-of-way traffic control systems and reviews roadway construction project plans that impact signs, markings, street lights, and traffic signals to ensure compliance with traffic control device requirements.

Reviews and evaluates blueprints, architectural drawings, design plans, and project development documents for permits, which includes the review and approval of traffic control plans for street occupancy permits.

Prepares a variety of engineering studies, correspondences, and reports, for wastewater and storm drainage projects, capital improvements projects, prepares feasibility studies, conducts traffic control studies, and reviews consultant proposals and contracts.

Reviews projects to ensure compliance with engineering codes and standards, monitors projects for quality, identifies strategies to overcome barriers, ensures materials comply with project specifications, reviews calculations, and performs field and site inspections.

Performs other duties as assigned.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

**Competencies**

Decision Making - Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.

Influencing/Negotiating – Persuades others to accept recommendations, cooperate, or change their behavior; works with others toward an agreement; negotiates to find mutually acceptable solutions.

Oral Communication - Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.
Project Management – Manages all aspects of one or multiple projects through initiating, planning, executing, monitoring, and closing project, complying with established control systems and rules. Monitors processes, progress, and results. Determines objectives, sets priorities, delegates work, and provides others with a clear direction. Works with others towards an agreement that may involve exchanging specific resources or resolving differences.

Working with People - Shows respect for the views and contributions of other team members. Shows empathy, listens, supports, and cares for others, and reconciles conflict

Written Communication - Composes, reviews, edits, and issues written materials for diverse audiences and communicates purpose in a succinct and organized manner appropriate for context, time, and place.

### Knowledge & Skills

Knowledge of planning, coordination, and execution of business functions, resource allocation, and production.

Knowledge of budgeting principles and practices sufficient to be able to assume budgetary responsibilities as required.

Knowledge of various types of contracts, techniques for contracting and procurement, contract negotiation, and administration.

Knowledge of the concepts, principles, theories, and methods required to plan, design, construct, operate, and maintain facilities such as buildings, transportation systems water and sanitary systems, and other public works systems.

Knowledge of the principles, methods, and tools for conducting performance assessment to enhance and validate project performance and user acceptance.

### Education Requirement

Bachelor’s Degree in Engineering.

### Experience Requirement

Four (4) years experience as an entry level Engineer.

### Education & Experience Equivalency

No substitution of experience for education is permitted.

Additional appropriate education may be substituted for experience requirements.

### Licensure & Certification

By position, requires a valid Driver’s License at the time of application.

Requires registration as a Professional Engineer (PE) by the Colorado State Board of Registration for Professional Engineers at the time of application.

Registration in another state will be accepted in lieu of this requirement, provided that the applicant has Colorado registration at completion of probation.

Licenses and certifications must be kept current as a condition of employment.
**Working Environment**

Pressure due to multiple calls and inquiries.
Subject to long irregular hours.
Subject to many interruptions.
Subject to varying and unpredictable situations.

**Level of Physical Demand**

1-Sedentary (0-10 lbs.)

**Physical Demands**

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

- Standing: remaining on one’s feet in an upright position.
- Walking: moving about on foot.
- Sitting: remaining in the normal seated position.
- Carrying: transporting an object, usually by hand, arm, or shoulder.
- Balancing: maintaining body equilibrium to prevent falling over.
- Stooping: bending the body by bending spine at the waist.
- Reaching: extending the hand(s) and arm(s).
- Handling: seizing, holding, grasping, or otherwise working with hand(s).
- Feeling: perceiving attributes of objects by means of skin receptors.
- Talking: expressing or exchanging ideas by means of spoken words.
- Hearing: perceiving the nature of sounds by the ear.
- Eye/hand/foot coordination: performing work through using two or more.
- 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 distinguish and identify different colors.
- Lifting: raising or lowering objects weighing no more than 10 pounds, from one level to another.

**Background Check Requirement**

- Criminal Check
- Education Check
- Employment Verification
- Licenses/Certification
- By position, Motor Vehicle Record

**Assessment Requirement**

None

**Probation Period**

Six (6) months.
Class Detail

Pay Grade: E-814
FLSA Code: Y
Management Level: 9
Established Date: 9/21/2018
Established By: Lori Schumann
Revised Date:
Revised By:
Class History: