

City of Fort Worth, Texas Job Description

Classification Title	Senior Professional Engineer		
Job Code:	PR2510	Job Family:	Professional
Pay Grade	614	Date Reviewed:	07/10/15
FLSA Status	Exempt	Date Revised:	02/03/25

GENERAL SUMMARY

Leads, oversees and participates in the more difficult engineering work of employees responsible for civil engineering services and fire protection engineering including the planning, design, inspection, and contract administration of projects, including street, storm water system, traffic controls, water treatment, traffic operations, water and wastewater facilities, facility planning and related capital improvement projects; ensures work quality, fire sprinkler and alarm system plans and adherence to established policies and procedures; and performs the more technical and complex tasks relative to assigned area of responsibility.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Supervises staff, which includes prioritizing and assigning work; conducting performance evaluations; ensuring staff is trained; ensuring employees follow policies and procedures; maintaining a healthy and safe working environment; and, making hiring, termination, and disciplinary decisions or recommendations.
2. Participates in the development of policies and procedures; monitors work activities to ensure compliance with established policies and procedures; makes recommendations for changes and improvements to existing standards and procedures.
3. Continuously monitors and evaluates the quality, responsiveness, efficiency and effectiveness of engineering and construction project management, delivery methods and procedures; works with employees on the continuous improvement of engineering and construction project management services.
4. Recommends and assists in the implementation of goals and objectives; implements approved policies and procedures.
5. Performs the more technical and complex tasks of the work unit including managing high impact engineering projects, updating and analyzing engineering models for assigned area, and coordinating the work of outside consultants.
6. Performs professional civil engineering work including the design, inspection and contract administration of water and wastewater facilities, traffic mitigation, facility planning and related capital improvement areas.

7. Provides professional engineering expertise in the design and construction of major civil engineering projects; reviews, evaluates and approves a variety of engineering and construction documents, including drawings, plans, designs, contract documents, technical specification, cost estimates, environmental documents and reports.
8. Identifies and plans required capital improvement projects for system expansion; designs the necessary modifications and/or new construction of public works streets, water, and related projects within City, County, State and Federal guidelines.
9. Prepares special engineering studies and reports; conducts comprehensive studies for planning future expansions including streets, utilities, flood control systems, and other public works projects.
10. Prepares reports and reimbursement requests for projects with State and/or Federal funding.
11. Prepares analytical and statistical reports on operations and activities.
12. Conducts public meetings and addresses questions presented during the meetings.
13. Performs other related duties as required.
14. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

When assigned to the Fire Department:

1. Performs professional fire protection engineering work including the design, inspection and contract administration of all aspects of fire protection.
2. Recommends and assists in the development of fire codes and standards for the fire department.
3. Assists in the identification and planning that is required in capital improvement projects for the fire department and the City of Fort Worth.
4. Prepares special engineering studies and reports; conducts comprehensive studies for fire department planning and use.

KNOWLEDGE, SKILLS & ABILITIES

• **Knowledge of:**

- Operational characteristics, services and activities of a comprehensive civil and fire protection engineering program involved in the design, construction, inspection and contract administration of street, storm water system, traffic control, water and wastewater facilities projects.
- Modern and complex principles and practices of engineering design involving a variety of materials.
- Principles of advanced mathematics.
- Principles, practices, methods and techniques of construction and fire protection engineering.
- Recent developments, current literature, and sources of information in the civil engineering field.

- Principles and practices of civil and fire protection engineering.
- Terminology, methods, practices, and techniques used in engineering report preparation.
- Office equipment including computers and supporting word processing and spreadsheet applications.
- Scheduling software.
- Pertinent Federal, State, and local laws, codes and regulations.
- Performance based design.
- Construction methods and practices.
- Federal and State grants process.
- **Skill in:**
 - Project Management.
 - Microsoft Office.
 - Customer service.
 - Negotiation.
- **Ability to:**
 - Communicate clearly and effectively, both orally and in writing.
 - Handle high impact and complex Engineering and/or Construction projects within the assigned area of responsibility.
 - Lead, organize and review the work of subordinate employees.
 - Direct and coordinate various City engineering programs and projects.
 - Prepare, review and evaluate construction bids, cost estimates, change orders and related financial impact analyses.
 - Perform professional civil engineering work including the design, inspection and contract administration of water and wastewater facilities, facility planning and related capital improvements.
 - Interpret and apply pertinent Federal, state, and local laws, codes, rules, and regulations.
 - Ensure project compliance with appropriate Federal, state, and local laws, codes and regulations.
 - Perform research and solve multi-disciplinary engineering problems.
 - Develop, review and modify engineering plans, designs, and specifications.
 - Interpret and explain City policies and procedures.
 - Prepare clear and concise reports.
 - Troubleshoot complex systems in treatment processes.
 - Establish and maintain effective working relationships with those contacted in the course of work.
 - Coordinate with outside agencies (may include Texas Department of Transportation, Various Railroads and United States Army Corps of Engineers) and resolve various issues to gain the necessary approval from these agencies.

MINIMUM JOB REQUIREMENTS

Bachelor's Degree from an accredited college or university with major course work in civil engineering or a related field and three years of professional civil engineering experience as a registered professional engineer of which two years must be within or related to the area of assigned responsibility.

OTHER REQUIREMENTS

Possession of registration as a Professional Engineer in the State of Texas. If licensed in another state, continued employment will be contingent upon obtaining registration as a Professional Engineer within the State of Texas within six months of employment.

Possession of, or ability to obtain, an appropriate, valid Texas driver's license.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing and balancing.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Light Work – Depending on assignment, positions in this class typically exert up to 20 pounds of force occasionally, up to 10 pounds of force frequently, and/or a negligible amount of force constantly having to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for the Sedentary Work category and the worker sits most of the time, the job is rated Light Work.