CITY OF ST. HELENA

JUNIOR ENGINEER
ASSISTANT ENGINEER

Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications may not include all duties performed by individuals within a classification. In addition, specifications are intended to outline the minimum qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.

DEFINITION:

Under general supervision, performs professional engineering work in the design, evaluation and construction of streets, traffic controls, landscaping, parks, storm drains, sewers, water and other Public Works projects; serves as a project manager on Capital Improvement Projects; reviews engineering reports, drawings, specifications and calculations for buildings, structures, streets, sewers and other Public Works facilities to ensure compliance with current industry practices, codes, regulations and ordinances; performs other related duties as required.

DISTINGUISHING CHARACTERISTICS:

Junior Engineer

The Junior Engineer is the entry level class in the professional engineering series that allows the incumbent to develop journey level knowledge and abilities. Initially, under immediate supervision, incumbents perform the more routine and less complex assignments within an established procedural framework where there are minimal consequences of error. This classification is alternatively staffed with the Assistant level and incumbents may advance to the higher level after gaining experience and demonstrating a level of proficiency that meets the qualifications of the higher level class.

Assistant Engineer

The Assistant Engineer is the journey level class in the professional engineering series and is the first licensed engineer level responsible for performing the full scope of duties, including design, plans review and construction management of Capital Improvement Projects and for reviewing private development projects for design conformance and accuracy. The classification is alternatively staffed with Associate Engineer, and incumbents may advance to the higher level after gaining experience and demonstrating a level of proficiency that meets the qualifications of the higher level class.

SUPERVISION RECEIVED/EXERCISED:

Receives general supervision from the Director of Public Works. Incumbents in this classification do not routinely exercise supervision.

ESSENTIAL FUNCTIONS: (include but are not limited to the following)

- Performs a broad range of construction project management, design and inspection activities on a variety of capital improvement projects, including streets, lighting, storm drainage, sewers, water, traffic, parks, and landscape; coordinates capital improvement projects with contractors, utility companies, other agencies, department staff and the general public; coordinates capital improvement
projects with field foremen.

- Reviews and/or prepares plans and specifications; prepares quantity and cost estimates; assists in the development of design procedures; interprets the application of design criteria; checks plans and specifications for accuracy of design and completeness.

- Analyzes and reviews plans for private and public development, including subdivisions, parcel maps, lot line adjustments, improvement plans, capital improvement projects, and requests for extensions of City services; determines impact and ensures compliance with City service standards for water, sewers, drainage, and streets.

- Reviews and prepares all legal descriptions, title reports, annexations, and acquisitions for real property; checks and reduces all field survey notes, plot levels, and topography and may perform survey work for design and construction purposes; develops and maintains a computer assisted drafting (CAD) system of all departmental maps, plots, project requirements, improvement plans, utility locations and City owned easements; represents the department on issues relating to geographic information systems (GIS).

- Administers design and construction contracts; maintains logs and tracks bond expiration dates; prepares reports for the Finance Department as required; collects all required inspection approvals; prepares staff reports for Council; prepares memos to City Clerk regarding accepting and releasing of bonds; prepares daily progress and final reports and prepares documentation associated bonds; prepares and maintains detail project records and plans; negotiates change orders; reviews payment of invoices; responds to RFI and construction correspondence.

- Assists in the preparation and monitoring of the department budget; participates in the development of water and sewer rates, and assessment fees; researches and prepares grant and loan applications; administers and monitors approved project grants and loans.

- Prepares and provides engineering reports, correspondence, staff reports, ordinances and resolutions; develops reports and statistics; assists in the preparation of short and long-range plans; reviews and comments on environmental impact reports and traffic studies; makes oral presentations and participates in organizational and community group meetings; responds to questions and inquiries, and investigates complaints concerning engineering problems.

- Establishes positive working relationships with representatives of community organizations, state/local agencies, City management and staff and the public.

WORKING CONDITIONS:

Position requires sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping, crawling and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment, and acute hearing is required when providing phone and face-to-face service. The need to lift, carry, pull and push tools, supplies and other equipment weighing up to 25 pounds is also required. Additionally, the incumbent in this position works outdoors in all weather conditions including wet, hot and cold.
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Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

QUALIFICATIONS:  (The following are minimal qualifications necessary for entry into the classification.)

Education and/or Experience:

Any combination of education and experience that has provided the knowledge, skills and abilities necessary for a Junior/Assistant Engineer. A typical way of obtaining the required qualifications is to possess the equivalent of:

Junior Engineer
A bachelor’s degree in Civil Engineering. Some professional engineering experience is desirable

Assistant Engineer
In addition to the above, one year of work related experience equivalent to that of a Junior Engineer in the City of St. Helena.

License/Certificate:

Possession of, or ability to obtain, a valid Class C California driver’s license.

Junior Engineer/Assistant
Possession of a valid certificate of registration as an Engineer-in-Training, issued by the California State Board of Registration for Civil and Professional Engineers.

KNOWLEDGE/ABILITIES/SKILLS:  (The following are a representative sample of the KAS’s necessary to perform essential duties of the position. The level and scope of the knowledge and abilities listed below vary between the Junior/Assistant levels.)

Knowledge of:

Principles and practices of Capital Improvement Project construction project management; principles, procedures, practices and standards of municipal engineering; surveying methods and techniques; strength of materials and stress analysis; CEQA requirements; municipal engineering laws, ordinances, codes, specifications and plans; engineering project inspection methods; working knowledge of contract administration; operational characteristics and use of standard equipment used in the engineering profession; applicable federal, state and local laws, codes and regulations, including the St. Helena Municipal Code, ordinances and codes related to building construction; methods and techniques of scheduling work assignments; standard office procedures, practices and equipment; modern office equipment, including a computer and applicable software; methods and techniques for record keeping and report preparation and writing; proper English, spelling and grammar; occupational hazards and standard safety practices.
Ability to:

Serve as the project manager on one or more Capital Improvement Projects; prepare accurate plans, specifications, cost estimates, change orders and engineering reports; make accurate engineering computations; analyze and evaluate design drawings and specifications; prepare and manage project budgets; negotiate with citizens, property owners, businesses and other agencies; maintain detailed project management records and documentation; learn and apply established principles and practices of municipal engineering; manage the work of outside consultants; administer programs involving federal, state and local grants; interpret, explain and apply applicable laws, codes and regulations; read, interpret and record data accurately; organize, prioritize and follow-up on work assignments; work independently and as part of a team; make sound decisions within established guidelines; analyze a complex issue, and develop and implement an appropriate response; follow written and oral directions; observe safety principles and work in a safe manner; communicate clearly and concisely, both orally and in writing; establish and maintain effective working relationships.

Skill to:

Operate an office computer and a variety of word processing and software applications; safely and effectively operate engineering tools and equipment.