



## ASSISTANT ENGINEER

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

### **SUMMARY DESCRIPTION**

Under direction, performs construction contract administration and fiscal control; coordinates various engineering special projects and studies; assists with the preparation and administration of assigned engineering section budget.

This is a broad classification with individual positions assigned to specific functional areas; duties and assignments may overlap depending on the operational needs of the department and staffing levels.

### **DISTINGUISHING CHARACTERISTICS**

This is the entry-level class in the professional engineer series. This class is distinguished from the Associate Engineer by the performance of the more routine tasks and duties assigned to positions within the series including preparation of less complex plans, work orders and cost estimates. Since this class is typically an entry-level class, employees may have only limited or no directly related work experience. Employees may be assigned duties in a variety of areas to gain experience and to meet workload needs.

### **REPRESENTATIVE DUTIES**

*The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

1. Administer assigned contracts and provide administrative support required in the preparation of construction and maintenance contracts.
2. Conduct special studies or research to solve customer service problems.
3. Participate in the preparation and administration of program budgets for assigned area; submit budget recommendations; monitor expenditures.
4. Assist in the selection of outside consultants and contractors; negotiate consultant contracts; monitor consultant work and progress of projects and disbursements of payments.
5. Compile engineering and other data for use by other staff members.
6. Assist in the review and preparation of engineering plans, specifications, cost estimates, and reports.
7. Assist in the preparation of City Council agenda items for assigned area.
8. Respond to citizen complaints and investigate citizen concerns in assigned area.
9. Answer questions and inquiries from the public, architects, builders, engineering staff, public works department employees, and other city departments; perform field inspections as necessary to resolve questions and code interpretations.

10. Prepare construction drawings using AutoCAD drafting software to assist in the preparation of civil engineering designs; perform calculations and computations for professional engineer review; perform field work to support project design and construction.
11. Assist in the preparation and issuance of requests for proposals and contracts to consultants and contractors.
12. Prepare various applications for state and federal grants; research publications and industry information sources.
13. Maintain awareness of new developments in assigned area; incorporate new developments as appropriate into programs.
14. Perform related duties as required.

**When assigned to District Engineering:**

15. Review and analyze water and sewer improvement plans submitted by private engineers and developers and assist in developing comments and conditions for project completion.
16. Compute sewer and water fees.
17. Review environmental impact reports (EIR) to investigate the effects of new development on utility systems.
18. Review the development of proposed potable and recycled infrastructure improvement plans including easements, legal descriptions, and agreements; recommend plans for approval by the District Board of Directors.
19. Assist to ensure compliance with applicable local, state and federal waterworks standards, rules and regulations and health and safety requirements.
20. Prepare requests for qualifications (RFQ's) and request for proposals (RFP's) for the solicitation, evaluation and selection of engineering consultants.

**When assigned to Traffic Engineering:**

21. Design traffic signals including the preparation of project specifications.
22. Program timing of traffic signal controllers.
23. Inspect traffic signal construction projects.
24. Assist in supervising lower level technical engineering staff.
25. Plan check traffic signal plans and specifications prepared by various developers.

**When assigned to Building and Safety:**

26. Assist in reviewing building construction plans for structural integrity and code compliance.
27. Assist in reviewing engineering reports and cost estimates for construction in the floodplain.
28. Perform plan check for residential, commercial and industrial projects; make recommendations on engineering problems as necessary.

29. Assist in updating building and safety codes and in the development of plan check procedures.

### **QUALIFICATIONS**

*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

#### **Knowledge of:**

Basic operations, services and activities of assigned engineering program.  
Principles and practices of contract administration, negotiation and management techniques.  
Principles and practices of structural engineering and architecture.  
Traffic engineering and traffic signal design fundamentals.  
Methods and techniques of traffic signal equipment maintenance.  
Principles and practices of engineering pertaining to design and construction of water and sewer plans, specifications, and estimates.  
Drafting techniques and computer aided drafting (CAD) systems.  
Geographic information system (GIS) software.  
Computer applications related to project management and tracking.  
Research methods and sources of information related to assigned area of work.  
Basic procedures, methods and techniques of budget preparation and control.  
Modern office equipment including computers.  
Pertinent federal, state, and local laws, codes and safety regulations.

#### **Ability to:**

Administer construction and maintenance contracts.  
Prepare and/or review construction documents and specifications.  
Manage multiple projects and activities.  
Assist in the review and preparation of reports, cost estimates, studies and investigations.  
Inspect traffic signal construction projects.  
Review and prepare change orders and progress payments on engineering construction projects.  
Plan check traffic signal plans.  
Elicit community and organizational support for assigned programs.  
Interpret and explain City policies and procedures.  
Prepare and administer program budgets.  
Prepare clear and concise reports.  
Allocate limited resources in a cost effective manner.  
Communicate clearly and concisely, both orally and in writing.  
Establish and maintain effective working relationships with those contacted in the course of work.

**Education and Experience Guidelines** - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

#### **Education/Training:**

Equivalent to a Bachelor's degree from an accredited college or university with major course work in engineering or a related field.

#### **Experience:**

One year of related engineering experience desirable.

#### **License or Certificate:**

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

Possession of an Engineering in Training (EIT) certificate is desirable.

Possession of, or ability to obtain, a Plans Examiner certificate may be required depending on area of assignment.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*The conditions herein 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 job functions.*

**Environment:** Office and field environment; work with computers; exposure to noise and poisonous gases and liquids.

**Physical:** Sufficient physical ability to work in an office setting and operate office equipment; sit, stand, and walk for prolonged periods of time; climb ladders and slopes; operate motorized vehicles.

**Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate equipment.

**Hearing:** Hear in the normal audio range with or without correction.

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*Johnson & Associates*

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