



June 2008

ENGINEERING CONSTRUCTION INSPECTOR

DEFINITION

Under general supervision, performs a full range of technical inspection work involving public works and capital construction and improvement projects to ensure compliance with plans, codes, specifications, and contract provisions; ensures compliance with City's standards and specifications; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Capital Construction and Transportation Engineer. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This is a full journey-level class responsible for performing a wide range of field engineering construction inspection duties of public works and capital improvement projects. Incumbents are expected to work independently exercising initiative and judgment with general direction. Successful performance of the work requires the frequent use of tact, discretion, and independent judgment, knowledge of departmental and City activities, and extensive staff, public, and organizational contact. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the building inspection class series in that the latter performs inspection and plan check duties related to the construction of residential, commercial, and industrial buildings.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

Management reserves the rights to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations where appropriate so that qualified employees can perform the essential functions of the job.

- Performs routine to complex technical engineering inspections of public works and capital improvement projects; inspects projects performed under contract for compliance with plans and specifications; reviews and recommends progress payments; prepares change orders; evaluates possible public improvements as needed, ensuring work performed adheres to City standards, determining and noting major and minor defects, and evaluating appropriate actions in order to remedy defects as needed.
- Observes, tests and reports on construction materials; verifies quantities; notifies contractors if unsafe conditions are observed at construction sites; reports work not in accordance with specifications and recommends work stoppage for non-compliance; consults with supervisors on major deviations from specifications.
- Prepares written reports of inspections and construction change orders; composes correspondence including violation letters and illegal encroachments.

- Coordinates inspections by the State, County, service districts, and consultants.
- Ensures effective corrective measures by utilizing individual judgment in interpreting legal requirements and standards of methods, materials, and workmanship.
- Maintains field records, including sketches, photographs, drafting, and narrative notes; prepares written reports of inspections.
- Utilizes a variety of tools and equipment, including measuring rods, tapes, surveying transits, calculators, and other tools to determine distance, location, dimension, depth grade, and to calculate volumes.
- Meets and confers with contractors, public agencies, and the general public; responds to inquiries and investigates complaints from the public concerning public works and capital improvement projects, codes, and standards.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles, practices, methods, materials, equipment, and safety requirements of public works, capital improvement, and utility construction and construction inspection.
- Modern developments, current literature, and sources of information regarding engineering and construction.
- Occupational hazards and standard safety practices necessary in the area of construction inspection.
- Designs, plans, and specifications used in public works and capital improvement project construction.
- Applicable Federal, State, and local laws, codes, ordinances, and regulations pertaining to assigned areas of responsibility.
- Basic surveying principles and practices.
- Methods and techniques of material testing.
- Field engineering practices and basic design criteria for public works projects.
- Principles and practices of data collection and report preparation.
- Record keeping principles and procedures.
- Modern office practices, methods, and computer equipment.
- Computer applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for effectively representing the City in contacts with governmental agencies, community groups, various business, professional, and regulatory organizations and with property owners, developers, contractors, and the public.
- Techniques for dealing effectively with the public, vendors, contractors, and City staff, in person and over the telephone.
- Techniques for providing a high level of customer service to public and City staff, in person, and over the telephone.

Ability to:

- Perform difficult and thorough field engineering construction inspections.
- Understand, explain, and apply applicable laws, codes, regulations, and standards.
- Detect flaws in construction methods and materials.
- Make accurate mathematical and geometric calculations.
- Read, understand, and interpret engineering and construction blueprints, plans, and specifications.
- Use tact and firmness in working with contractors to ensure conformity of construction with the interest of the public and the safety of employees.

- Interpret, apply, explain, and ensure compliance with applicable Federal, State and local laws, codes, and regulations.
- Prepare clear and concise reports, correspondence, policies, procedures, and other written materials.
- Identify and take appropriate action when unusual operating problems occur.
- Maintain accurate records and files of work performed.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Comprehend and use English effectively including producing all forms of communication in a clear, concise and understandable manner to intended audiences.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience, which would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to the completion of the twelfth (12th) grade, supplemented by college-level coursework or technical training in construction technology and three (3) years of increasingly responsible public works construction inspection experience.

Licenses and Certifications:

- Possession of a valid driver's license with a satisfactory driving record.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to inspect various City development sites, including traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points; to attend meetings and to operate a motor vehicle; vision to read printed materials and a computer screen, and make inspections; color vision to identify materials, structures, wires, and pipes; and hearing and speech to communicate in person, before groups, and over the telephone. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 40 pounds.

ENVIRONMENTAL ELEMENTS

Employees work partially in an office environment with moderate noise levels and controlled temperature conditions, and partially in the field and are occasionally exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.