CLASS SPECIFICATION Construction Inspector

GENERAL PURPOSE

Under general supervision, performs detailed inspections of public works and capital projects construction projects; interprets plans, details and specifications to ensure construction and contract compliance; prepares detailed project inspection reports; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Construction Inspector is the journey-level class in the Construction Inspector class series. Incumbents are responsible for performing the responsible duties involving the multi-disciplined inspection of public works and capital projects construction projects. Duties performed require a high degree of initiative, independent judgment and discretion along with the ability to handle new and unusual circumstances as they arise.

Construction Inspector is distinguished from Senior Construction Inspector in that incumbents in the latter class must possess advanced technical knowledge and experience and be responsible for providing lead supervision of inspection staff and performing the most difficult and complex construction inspection functions and duties.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

- Acts as liaison between the City and outside contractors, engineers and property owners on construction projects and construction inspection; responds to inspection requests and coordinates inspections with other City departments and public utilities; reviews construction project requirements, costs and issues with project managers; initiates pre-job meetings with developers to gather required information; represents the City in meetings with developers and contractors as required; provides daily inspection reports to project managers.
- 2. Inspects capital projects work sites and assesses construction performance and records construction activities to ensure compliance with project documents, including major mechanical, electrical, civil, instrumentation and control, telemetry, structural concrete and masonry, heating, ventilation and air conditioning systems, structural steel, piping systems, metal work and welding, painting and coating, asphalt and concrete pavement, earthwork, motor control systems and column pipe; makes grading observations and conducts erosion control inspections; checks lines, grades, elevations and size and location of structures; verifies that adequate material sampling and testing is performed; inspects adjacent properties for damage from construction activities; samples or requests samples be taken by independent laboratories and tests materials for compliance with specifications; enforces compliance with contract plans and specifications and rejects unsatisfactory or defective work.

- 3. Reviews and examines materials delivered to worksites for installation to verify their conformance to specifications; identifies and locates faulty materials and workmanship; documents compliance and suitability of materials for installation and application.
- 4. Tracks progress of construction projects; calculates and records quantities or materials used and computes contractor work in progress for progress payments; drafts and maintains files of daily inspection reports and project activities.
- 5. Ensures proper placement and maintenance of signs, barricades and warning devices; ensures proper safety practices are followed at work sites.
- 6. Performs field interviews and verifies certified payroll information to ensure contractors are paying prevailing wages to their staff and approved workforce is being used; provides field review forms and certified payroll reviews to project managers.

QUALIFICATIONS

Knowledge of:

- 1. Federal, state and local laws, statutes, codes and ordinances governing construction projects.
- 2. Common engineering construction methods.
- 3. Proper use of construction materials and equipment.
- 4. Safety requirements and procedures pertaining to work practices.
- 5. Theories, principles and practices of engineering, electronics and mathematics, including algebra, geometry and trigonometry.
- 6. Earthwork, asphalt paving and concrete construction principles, methods and techniques.
- 7. Surveying principles, methods and techniques.
- 8. Compaction principles, methods and techniques.
- 9. Principles and practices of mechanical equipment and paint/coating inspection.
- 10. Electric wire, conduit, electrical metallic tubing, cable tray and cable materials and terminology.
- 11. Electrical and telemetry principles, circuits, devices and systems.

Ability to:

- 1. Exercise considerable judgment and diplomacy in field conditions.
- 2. Analyze, interpret, prepare and make recommendations on complex construction plans, specifications, drawings, sketches, diagrams and codes.
- 3. Operate and use common electronic, construction, surveying and drafting tools including electronic locators, electronic multimeters, cameras, two-way radios, compaction and concrete testing equipment and nuclear density gauges.
- 4. Make quantity calculations and prepare estimates.

- 5. Inspect routine and difficult engineering construction.
- 6. Enforce and interpret regulations with firmness, tact and impartiality.
- 7. Record and design accurate and neat sketches during on-site field inspections.
- 8. Perform field tests following precise procedures and interpret observations and test results to determine acceptability.
- 9. Coordinate necessary work between several entities.
- 10. Establish and maintain effective working relationships with City management, staff, contractors, the public and others encountered in the course of work.

Education, Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school or G.E.D. equivalent; and two years of experience in construction inspection or six years of trades experience working on large public works construction projects; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

A valid California driver's license and the ability to maintain insurability under the City's vehicle insurance policy.

PHYSICAL AND MENTAL DEMANDS

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

Physical Demands

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee frequently is required to stand and talk or hear; walk; sit; climb or balance; stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to 50 pounds, and occasionally lift and/or move up to 100 pounds.

Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

Mental Demands

While performing the duties of this class, employees are regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve problems; use math and mathematical reasoning; observe and interpret situations; learn and apply new information or new skills; work under deadlines with constant interruptions; interact with City management, staff, contractors, the public and others encountered in the course of work, some of whom may be dissatisfied or quarrelsome.

WORK ENVIRONMENT

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

The employee regularly works in outside weather conditions. The employee frequently works near moving mechanical parts; is exposed to wet and/or humid conditions, vibration, and street/road traffic; and works in high, precarious places. The employee is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock. The noise level is frequently loud.