



# Town of Moraga

## Engineering Technician/Inspector

Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specification ***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.

**Established:** October 2012  
**Revised:** October 2020  
**Employee Group:** Moraga Employees Association  
**FLSA Status:** Non-Exempt

### **CLASSIFICATION DESCRIPTION**

#### **Purpose**

Under general supervision, this position provides a variety of paraprofessional engineering and transportation support; performs a variety of technical and administrative duties relating to the maintenance, plan check, engineering design, development of PS&Es, construction bidding, contract management, construction management, construction quality assurance, inspection, surveying, and ordinance enforcement regarding public infrastructure and private land development under public works review; receives, investigates, and responds to complaints; maintains and updates engineering maps, drawings, records, and files; and performs related duties as required.

#### **Distinguishing Characteristics**

Incumbents will provide technical assistance and support to professional staff and construction inspection on encroachment permits, land development and construction projects. The Engineering Technician/Inspector class is distinguished from the Assistant Engineer by more routine tasks and duties received and by less independence with which to perform.

#### **Equipment, Methods and Guidelines**

Uses Federal, State, County, and local standard plans, specifications, rules and regulations; personal computer for word processing, spreadsheets, time card entry, and similar applications; motor vehicle, hand levels, pocket scales, engineering tapes, calculators, printer, copier, telephone, personal protective, hand tools, and engineering and survey equipment.

#### **Working Conditions**

Office and inspection site environment in all types of weather. Work may involve inconsistent work schedules to accommodate construction activities and may include work during weekends, holidays, and overtime as required.

#### **Physical Demands**

Work is often performed in an outdoor construction environment with year-round exposure to varying weather conditions. Work is subject to construction site noise and environment including exposure to loud equipment and machinery. Work will include exposure to various conditions encountered in a construction environment, such as steep slopes; various plants and natural environments; moving machinery; marked changes or extremes in temperature/humidity; dust, fumes, smoke, gases, odors, mists, or other irritating particles; excessive noise; slippery or uneven walking surfaces; working

below ground and in confined spaces; vibrations; radiation or electrical energy; solvents, greases, oils, or chemicals; flames or burning items. (Some specific tasks may require specialized training by the Town prior to undertaking said activities, such as confined space entry.) Work is performed at various remote locations. Positions may require occasional overtime and weekend work and travel is rare.

### **Supervision Received and Exercised**

Works under close supervision and follows established procedures; work is reviewed frequently by the Senior Civil Engineer, or designated personnel, for progress and accuracy. Independently applies applicable codes and ordinances to ensure conformance. Control over work methods is general, rather than detailed in nature; makes independent decisions when issuing permit authorizations, approving construction start dates, stopping or rejecting work, or issuing citations for violations. Work assignments, including written reports and communications, are reviewed upon completion but before submission or distribution.

### **EXAMPLES OF DUTIES**

Duties may include, but are not limited to, the following:

- Performs field, office, and computer-aided basic engineering studies and activities.
- Prepares plans, specifications, and cost estimates under direction of engineer.
- Conduct construction inspections for Capital Improvement Projects, encroachments in public right of way, public facilities improvements, stormwater facilities, and land development projects.
- Performs measurements, staking, topographical work, leveling and other related land surveying duties.
- Performs field work such as conducting observations, making traffic counts, and analyzing traffic flow.
- Reviews accident reports and other documentation.
- Researches records and other data used to compile information for decision making.
- Assists in receiving sealed bids, attends bid openings as a public works representative, reviews bids for general completeness and responsiveness, and tabulates bids.
- Maintains engineering and traffic/transportation files, including plans, studies, inspections, surveys, maps and other data related to engineering and transportation projects; updates traffic maps, engineering drawings, standard details, and information recorded in GIS.
- Receives and responds to requests from developers, contractors, private engineers, title companies, real estate brokers, and others for base maps, property line information, encroachment permits, benchmarks, copies of maps, confirming street information and other geographical data.
- Provides excellent customer service; responds to routine citizen inquiries and complaints relating to the Town's infrastructure, including researching archival information from the Town's files, seeking input from other departments as necessary, and communicating issues to appropriate supervisory or management staff for feedback or direction.
- Processes encroachment permits to ensure compliance with Town policy, codes, and regulations and fee, insurance, and bond requirements; coordinates and communicates with contractors, residents, other agencies, and other Town staff.
- Uses clearly defined practices and procedures to inspect the methods and materials used in encroachment permit work, construction projects, construction surveys, construction safety precautions, traffic control, and erosion and sediment control.
- Coordinates material testing and analyzes material test results including relative compaction

tests, gradation of aggregates, slump tests, and resistant value of soils; Inspects producers of construction materials and its sources.

- Reviews and interprets construction plans, specifications, encroachment permits, and other documents affecting assigned projects; maintains daily diary and field records of construction activities, contractor crew, equipment, materials and quantities.
- Participates in meetings to discuss construction details and resolves issues with contractors, other departments, other agencies, and the public; identifies construction problems, monitors the corrections of project deficiencies, and recommends approval of necessary contract change orders and plan adjustments.
- Conducts compliance review of public's maintenance responsibilities of sidewalk, curb, gutter, private storm drainage conveyance systems, and creeks; posts liens, required repairs, and construction notices.
- Can handle multiple projects and responsibilities simultaneously; has handled a wide variety of assignments in past and/or current position.
- Assists in the administration of public works contracts including contract costs, materials verification, and compliance with State and Federal regulations.
- Assists in preparing documentation related to obtaining and administering Federal and State grants.
- Perform related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge and Abilities**

- Knowledge of principles, techniques and terminology relating to civil engineering, construction inspection, construction quality assurance, equipment/tools, materials, workmanship industry standards, and construction safety regulations.
- Knowledge of terminology, methods, practices and techniques of computer-aided drafting for AutoCAD.
- Knowledge of principles of engineering, algebra, plane geometry, and trigonometry.
- Skill in computers, various software applications, and office and field equipment.
- Skill in communicating effectively in English both orally and in writing.
- Skill in establishing and maintaining effective working relationships with others.
- Skill in collaborating, engaging and motivating permittees, clients and the community to meet regulatory compliance objectives.
- Ability to work in a complex and demanding environment with significant public interaction.
- Ability to work in the field and in the office, attend meetings, and communicate with staff, developers, contractors, engineers, and various stakeholders.
- Ability to read, interpret, and develop graphic and written materials, including plans, specifications and maps.
- Ability to research and interpret information relevant to projects.
- Ability to operate hand-held tools and surveying instruments used.
- Ability to work on multiple projects, effectively set priorities, and complete assigned tasks in an accurate and timely manner.
- Ability to prepare accurate notes, sketches, and daily reports.
- Ability to understand, interpret and apply applicable professional/technical principles and practices; Town-wide/departmental, State and Federal procedures/policies, standards,

specifications, ordinances and codes, rules and regulations.

- Knowledge of maps and documents relating to subdivisions, the Map Act, Title Reports, easements and right of way is helpful.
- Knowledge of CalTrans Standard Specifications, traffic control, traffic safety, and MUTCD manual helpful.
- Knowledge of storm drainage and storm water pollution control regulations, principles and practices is helpful.
- Knowledge of ESRI ArcGIS is helpful.

### **Education and Experience**

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. Generally, this will require:

- Experience: Two (2) years of experience with increasing responsibility in performing various engineering related tasks: such as CAD drafting; land surveying; materials testing; issuing and inspecting encroachment permits; and/or inspection of public works construction, storm drain, and/or right-of-way improvements.
- Education: Equivalent to a high school diploma.
- Associates Degree from an accredited college or in engineering, engineering technology, physical sciences, geomatics or related curriculum can substitute for one (1) year of experience.
- Bachelor Degree from an accredited college or university in engineering, engineering technology, physical sciences, geomatics or related curriculum can substitute for two (2) year of experience.

### **License or Certificate**

Failure to possess or maintain the valid license shall result in discipline up to and including termination of employment. This classification requires the ability to travel independently within and outside of Town limits.

- A valid California Driver's License and a satisfactory driving record are conditions of initial and continued employment.
- Registration as an Engineer-in-Training issued by the California State Board of Registration is desirable, and can substitute for one (1) year of experience.
- Registration as a Soils, Reinforced Concrete or Masonry Special Inspector issued by the International Code Council (ICC) is desirable and can substitute for one (1) year of experience.