ASSISTANT ENGINEERING TECHNICIAN ASSOCIATE ENGINEERING TECHNICIAN SENIOR ENGINEERING TECHNICIAN

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 supervision (Assistant Technician) or general supervision (Associate Technician and Senior Technician), perform a variety of responsible, technical, paraprofessional office and field engineering, and public works tasks.

DISTINGUISHING CHARACTERISTICS

Assistant Technician - This is the entry level class in the Technician series providing technical, paraprofessional Engineering support. Employees at this level are not expected to function with the same amount of program knowledge or skill level as employees allocated to the Associate Technician level and exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. Advancement to the Associate Technician level is based on demonstrated proficiency in performing the assigned functions and is at the discretion of higher level supervisory or management staff.

Associate Technician - This is the full journey level class in the Technician series. Employees within this class are distinguished from the Assistant Technician by the performance of the full range of duties as assigned. Employees 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. Positions in this class series are flexibly staffed and are generally filled by advancement from the "Assistant" level, or when filled from the outside, require prior experience. Advancement to the "Associate" level is based on management judgment and/or certification or testing that validates the performance of the full range of job duties.

<u>Senior Technician</u> - This is the advanced journey level class in the Technician series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees perform the most difficult and responsible types of duties assigned to classes within this series. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

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. Perform a variety of technical, administrative, advanced clerical, and routine staff duties; research and gather data, and perform calculations and report writing as part of research for public and private development projects.
- 2. Receive and respond to inquiries from the public, contractors, developers, City employees, and other parties.

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- 3. Establish filing systems; maintain records, files, databases, and reference materials; assist with plan/map filing.
- 4. Review and process various permits.
- 5. Post notices and prepare mailings for public hearings on individual properties.
- 6. Prepare and proofread a variety of reports, letters, agreements, and other correspondence; prepare graphs, charts, sketches and other materials.
- 7. Research and resolve billing issues with various parties.
- 8. Act as a liaison with other departments, divisions, and outside agencies.
- 9. Create and maintain a running inventory of improvement plans and files.
- 10. Use computer aided drafting techniques and procedures to prepare engineering drawings, designs, and calculations for construction projects.
- 11. Prepare project design, specifications, and cost estimates for City projects such as streets, sewers, storm drains, water lines, and traffic signals.
- 12. Take and compile traffic counts, radar surveys prepare stop sign warrant analyses and traffic signal warrant analyses, review accident data and other traffic information. Maintain files and records.
- 13. Measure and prepare diagrams of intersections showing sight distances and traffic flow.
- 14. Prepare signing and marking plans and traffic signal designs.
- 15. Under the direction of a Land Surveyor or qualified Registered Civil Engineer, write property descriptions.
- 16. Respond to requests for information regarding flood zones and encroachment permits.
- 17. Review and process less complex minor subdivisions, lot line adjustments, and parcel mergers.
- 18. Update City maps.
- 19. Perform and participate in field surveys.
- 20. Collect data and make calculations and mathematical checks.
- 21. Do routine field inspections and prepare work requests for curb markings, signage and other public works projects; may assist in the field inspection of more complex public works projects, developments and other improvements requiring permits and inspection.
- 22. May take samples of construction material for testing.
- 23. May draft grant applications and coordinate invoices with funding agency.
- 24. Perform office survey control and right-of-way research.

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- 25. Investigate and resolve citizen complaints regarding construction work on City facilities.
- 26. Calculate and collect fees.
- 27. Respond to public records requests.
- 28. Perform related duties as required.

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:

- Principles and practices associated with civil or traffic engineering.
- Drafting techniques and equipment.
- Surveying methods, procedures and equipment.
- Effectively represent the engineering division to outside individuals and agencies to accomplish the goals and objectives of the division.
- Mathematical principles as applied to engineering and public works.
- Principles and practices used to establish and maintain files and information retrieval systems.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Construction standards.
- Pertinent federal, state, and local codes, laws, and regulations.

Ability to:

- Perform a variety of responsible, technical, paraprofessional tasks related to office and field engineering.
- Read and interpret maps, plans, sketches, schematics, diagrams, and blueprints.
- Draft engineering drawings.
- Apply surveying techniques and use instruments common to land surveying.
- Respond to requests and inquiries from the general public.
- Prepare legal property descriptions.
- Make field and office engineering computations.
- Compile data, maintain records and files, and participate in the preparation of administrative or technical reports.
- Plan and organize work to meet changing priorities and deadlines.
- Organize and maintain accurate records and files.
- Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
- Work cooperatively with other departments, City officials, and outside agencies.
- Interpret and apply applicable federal, state, and local laws, codes, and regulations.
- Understand and follow oral and written instructions.
- 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

Assistant Engineering Technician

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in mathematics, construction, engineering, surveying, or a related field.

Experience:

One year of experience in paraprofessional civil engineering work is desirable.

License or Certificate:

Possession of an appropriate, valid driver's license.

Associate Engineering Technician

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in mathematics, construction, engineering, surveying, or a related field.

Experience:

Two years of experience in paraprofessional civil engineering comparable to that of an Assistant Technician with the City of Antioch.

License or Certificate:

Possession of an appropriate, valid driver's license.

Senior Engineering Technician

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in mathematics, construction, engineering, surveying, or a related field.

Experience:

Two years of experience in paraprofessional civil engineering comparable to that of an Associate Technician with the City of Antioch.

License or Certificate:

Possession of a valid California driver's license.

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: Work is performed primarily in a standard office setting with potential exposure to an outdoor field setting and travel from site to site.

<u>Physical</u>: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate

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office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

FLSA: Non-Exempt

Created: August 2019

This class specification identifies the essential functions typically assigned to positions in this class. Other duties <u>not described</u> may be assigned to employees in order to meet changing business needs or staffing levels but will be reasonably related to an employee's position and qualifications. Other duties outside of an individual's skill level may also be assigned on a short term basis in order to provide job enrichment opportunities or to address emergency situations.