Cit of Live Oak Established: June 2004
FLSA Status: Exempt

ASSOCIATE ENGINEER

PRINCIPAL ENGINEER

DEFINITION

Under direction, to do a variety of difficult field and office professional civil engineering work; to be in charge of difficult design on a project basis; and to do related work as required.

CLASS CHARACTERISTICS

The class of Associate Engineer is an advanced journey level position, and reports to the City Manager. The incumbent is required to be fully qualified in design work. Assignments may vary from design work, to acting as the resident engineer for the City of Live Oak, to being responsible for special programs such as planning or designing water distribution systems, or to exercising final review of all structural plans submitted by private builders. The incumbent also works closely with the City's contract engineering firm as directed.

The Principal Engineer level has responsibility for managing all the in-house engineering services, monitoring the City's engineering consultant contracts, and performs the most difficult in-house engineering assignments.

EXAMPLES OF DUTIES

NOTE: The following are the duties performed by employees in this classification. However, employees may perform other related duties at an equivalent level.

1. Plans, organizes and reviews or personally does the design and preparation of drawings, specifications and estimates in connection with the construction or maintenance of a wide variety of civil engineering projects, involving roads, water distribution systems, flood control structures, and other related engineer work unique to city facilities and infrastructure.

2. Performs difficult engineering office work in connection with cost analyses, progress reports and research or other specialized technical studies.

3. Acts as the City's resident engineer; directs the inspection of roads and structures under construction or repair; prepares daily, weekly, and monthly progress reports on assigned engineering projects.

4. Conducts special programs such as the planning or design of water distribution systems.

5. Reviews plans of private builders and contractors for conformance with engineering standards of structural design; acts as technical advisor on structural problems to field and office personnel; and if necessary, inspects commercial and industrial structures; answers inquiries concerning City

ordinances and policies relating to the design and construction of buildings, and various construction projects.

6. Designs, describes, and draws up contracts, plans and profiles for major engineering projects; reviews plans and maps of subdivisions, school sites and commercial and industrial developments for conformance with good engineering practice.

MINIMUM QUALIFICATIONS

Associate Engineer

Either I

The equivalent of one year of full-time experience performing journey level engineering work for a private or public agency.

Or II

Possession of a bachelor's degree in civil engineering from an accredited college or university.

AND

Experience:

The equivalent of three years of full-time, progressively responsible professional civil engineering experience.

Or III

Possession of a valid Certificate of Registration as a Civil Engineer issued by the California State Board of Registration for Civil and Professional Engineers.

Principal Engineer

In addition to the above, requirements, three years of full time experience performing journey-level engineering work for a public or private agency.

Certificate and License:

Possession of a valid California Motor Vehicle Operator's license.
Possession of a valid certificate as an engineer in training or Certificate of Registration as a Civil Engineer by the California State Board of Registration for Civil and Professional Engineers.

KNOWLEDGE AND ABILITIES

NOTE: The level and scope of the following knowledge and abilities are related to duties listed under the "Examples of Duties" section of this specification.

Knowledge of:

- Principles and practices of civil engineering.
- Engineering mathematics and economics.
- Stress analysis.
- Strengths, properties and use of engineering materials.
- Hydrology and hydraulic design engineering, surveying and construction.
- Descriptions of real property and valuation methods and terminology.
- Testing procedures and equipment, and the inspection of materials.

Abilities:

- Perform design work on engineering projects of major difficulty, or supervise others in design of lesser difficulty;
- Prepare engineering reports;
- Perform technical research;
- Layout and review the work of others and train them in engineering practices;
- Secure adherence to plans and specifications on the part of contractors;
- Maintain cooperative working relationships with organizations doing work on City contracts.
- manage a variety of simultaneous work projects and carry them through successful completion;
- prepare complex, clear and concise reports; define problem areas; collect and evaluate data; validate conclusions; define and select alternatives;
- project consequences of decisions and make appropriate recommendations;
- communicate effectively both orally and in writing;