Class Code: 2004
Revised: 2/14/19

ELECTRICAL ENGINEERING AIDE SPECIALIST I

PURPOSE AND NATURE OF WORK

Positions in this class perform non-routine technical work on electrical engineering projects, with responsibility for applying theory and principles of electrical engineering toward projects such as compiling/computing a variety of engineering data, analyzing data and preparing reports, and/or developing/preparing/making recommendations regarding schematics, designs, specifications, parts lists, etc. Work involves solving problems that are not easy to identify but are similar to those seen before. Solving these problems requires judgment such as setting priorities, evaluating results, or coordinating with others. Solutions can often be found by using methods chosen before in similar situations. Independent judgment is required to identify, select, and apply the more appropriate of available guidelines and procedures, interpret precedents, and adopt standard methods or practices to meet variations in facts and/or conditions. Work is performed under the supervision of a Professional Engineer, either directly or through an Electrical Engineering Aide Specialist II, who will convey objectives, give technical advice, and review project/solution before it is accepted. Nature of the work is not supervisory; however, incumbents may be assisted by lower level technicians.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Designs overhead and/or underground electrical systems, including line design, street lighting, and similar systems. Will supervise and inspect construction/installation of designed electrical jobs. Analyzes and interprets test information to resolve design-related problems. Provides technical assistance and resolution when electrical and/or engineering problems are encountered before, during, and after construction.

Reviews preliminary plans submitted for construction and comment on adherence to Lafayette Consolidated Governments standards. After approval, performs periodic inspections of projects while under construction and document activities.

Prepares and administers contracts related to design/construction projects (such as maintenance contracts for street lighting) and line location by corresponding with developers, keeping records of transactions, and processing payments to contractors.

Tracks use of cable, creates/updates engineering spreadsheets, updating applicable databases, performs load studies from service request, voltage complaints, or requests from department.

Receives engineering packet from electrical engineers and inputs data into a computer program, which generates work orders for construction/repair/maintenance. Updates work orders as necessary. When project is complete, will update geographic information system map layers to reflect changes and maintain accuracy.

Assists network engineers in the designing, bidding out, inspecting, and installation of related projects.

Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Knowledge of electrical engineering principles and practices and ability to independently apply those principles and practices towards accomplishing tasks.

Knowledge of and ability to perform mathematical operations specifically related to engineering.

Knowledge of construction techniques and practices.

Knowledge of related building regulations and codes.

Knowledge of and ability to use computer systems and software appropriate to the nature and level of work.

Ability to communicate effectively by telephone, in person, or in writing to both individuals and small groups.

Ability to produce, read, analyze, and comprehend job-related specifications, plans, and/or drawings.

Ability to inspect, investigate, and recommend courses of action related to the position.

Ability to independently solve engineering related problems related to area of assignment.

Ability to work independently to accomplish tasks.

DESIRED EDUCATION AND EXPERIENCE

Associate's Degree or completion of a technical specialty program of eighteen months – three years duration in electrical engineering (or closely related field) and significant prior working experience in the electrical engineering field incorporating the necessary knowledge, skills, and abilities required for the specific position.