

ENGINEERING AIDE, SENIOR

KIND OF WORK

Senior para-professional engineering work.

NATURE AND PURPOSE

Under limited supervision, performs basic engineering work such as directing surveys, development of construction plans, inspection of construction, developing maps and diagrams and checking engineering computations performed by lower level technical staff; performs related work as required.

This classification differs from the Intermediate level because an Engineering Aide, Senior provides basic engineering lead work and performs advanced level work. The next level above the Engineering Aide, Senior is the Engineering Specialist. At the Engineering Aide, Senior level, para-professional design development becomes the focus of the work, rather than operating and using technical equipment at the direction of a designer.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Leads survey party, keeps notes, runs transit or level to make maps and to plot land parcels by applying mathematical formulas, operating survey equipment and technical manuals.

Develops preliminary designs for bridges, dams, buildings, roads and utilities utilizing computers and manual drafting equipment and applying appropriate design standards.

Lead lower level technical staff in the development of plans to provide plans for bridges, dams, buildings, roads and utilities by using basic engineering knowledge and experience.

Interpret plans and specifications as necessary to inspect construction work by a contractor.

Reviews proposed plans for drainage and makes recommendations by using technical manuals and principles of hydraulics to insure that natural resource problems are not created by improper construction of drainage projects.

Reviews plans and specifications by using technical manuals and engineering principles to insure proper construction of water mains, treatment plants, wells, swimming pools and small sewage systems.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Fundamental practices of engineering and of construction materials and methods sufficient to review plans and to perform basic engineering work.

Field and office engineering equipment and instruments sufficient to develop plans, survey, inspect construction and perform other basic engineering work.

Basic engineering practices sufficient to develop engineering documents.

Ability to:

Operate and use survey equipment, drafting equipment, calculators and computers to perform detailed para-professional engineering work.

Lead and direct lower level Engineering Aides sufficient to accomplish assigned technical work such as surveys or development of construction plans.

Est.: 7/05/67
Rev.: 11/17/71; 3/81, 4/92

T.C.:
Former Title(s):