## ENGINEERING TECHNICIAN II

## NATURE OF WORK IN THIS CLASS:

This is complex technical engineering or surveying work.

Employees in this class perform the full range of complex technical engineering or surveying duties including independent work on specialized areas. Employees often serve as team or group leaders over less experienced technical staff.

ILLUSTRATIVE EXAMPLES OF WORK: (These examples do not list all the duties which may be assigned; any one position may not include all the duties listed).

Leads and performs complex drafting, computational and design duties in the preparation of plans and specifications for street paving, sewer and water construction and other engineering projects; performs technical work in the design of drainage systems, water distribution systems and similarly related engineering projects.

Inspects installation of water and sewer mains or other construction projects to insure compliance with plans and specifications.

Checks, analyzes, reduces and uses survey and other field data, adapting and transferring such material to maps, profiles, cross-sections, drafts or other compilation forms.

Applies analytical processes and mathematical techniques to photographs and imagery obtained by aerial or ground surveys to make topographic maps and to measure and interpret the natural and manmade features of an area.

Computes, prepares, reviews, and checkscosts estimates, contracts, plans, specifications, bids, vouchers, drawings and similar forms of data for accuracy and compliance with well defined standard or procedures.

Runs lines of level or traverse with level or transit and sketches topography along such lines.

Coordinates with contractor's personnel for completion of projects.

Solves practical problem encountered in fields of specialization such as those concerned with development of electrical, telephone, mechanical environmental, civil, architecture, and traffic engineering work.

Measures immense areas of land, sea, or space, taking into account the earth's curvature and its geophysical characteristic.

Determines the elevations, depressions, and contours of an area; indicates the location of distinguishing surface features.

Designs and draws sub-professional plans for the construction, repair or correction of island-wide power system on telephone systems, transmission and distribution lines and other electrical or telephone work facilities.

Locates boundaries of a particular tract of land, prepares map, records plots of the land and prepares legal descriptions of it for deeds, leases and other documents.

Conducts field inspection for the purpose of obtaining measurements and other essential data to complete engineering drawing and projects specification.

Performs related duties as required.

## MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:

Knowledge of the basic principles and practices of engineering as applied to drafting and design work.

Knowledge of the principles and practices of land surveying.

Knowledge of the policies, procedures and practices of departmental standards concerning inspection and material testing.

Ability to lead the work of others.

Ability to perform complex drafting, computational and design work.

Ability to perform inspections of construction projects.

Ability to keep survey notes and write reports.

Ability to translate survey notes into maps, plans, profiles, crosssections and legal descriptions.

Ability to work effectively with the public and employees.

Ability to maintain records and prepare reports.

Skill in the use and care of surveying and drafting equipment and instruments.

## MINIMUM EXPERIENCE AND TRAINING:

- (a) Three years of experience in sub-professional engineering and/or drafting work and graduation from high school supplemented by courses in drafting or surveying and mathematics; or
- (b) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

ESTABLISHED:

JULY, 1980

Pay Grade J Step 1: \$22,942 - Step 10: \$34,414

DAVID R. FLORES, Executive Director

Civil Service Commission