ENGINEERING AIDE I

CLASS DESCRIPTION

General Responsibilities:

This is basic technical support work performed in a professional engineering and public works construction environment. The work involves performing field and office tasks such as: technical drafting work, collecting and maintaining technical data, preparing and/or providing data for technical reports and performing other related tasks. The work is performed under the direct supervision of higher level technical or professional staff and is reviewed in progress and upon completion.

Examples of Duties and Responsibilities:

- Maintain inventory maps such as: traffic sign, street light, school zone, school crossing, and water hydrant maps. Review work orders, perform field checks and review base maps to determine necessary revisions. Keep maps up-to-date and prepare copies as necessary.
- Assist with the preparation of materials for public works construction projects by preparing basic sketches and drafting routine segments of overall plans as assigned.
- Setup and maintain computer and/or manual data files (e.g., databases, spreadsheets, historical files, etc.). Create or modify existing computer programs to provide information and graphics for regular and special reports.
- Gather, compare and combine data from various sources (e.g., other governmental agencies, Police Department, Parking Utility, etc.). Generate regular and special reports and help others do so. Maintain accident records. Assign analysis codes to accident reports and prepare for data entry. Maintain a pin map of accidents and other accident summaries as directed.
- Conduct traffic surveys and studies (e.g., speed, traffic control, school crossing, delay studies, etc.). Schedule and/or perform field studies as requested. Reserve equipment and coordinate activities with other involved staff. Combine, rearrange, summarize and assist with data analysis and graphic presentation.
- Use computer techniques and software, including computer assisted drafting, to perform a wide range of technical support functions.
- Process traffic accident reports. Conduct accident studies and review and diagram intersection accidents.
- Make field measurements for condition diagrams, street lighting maps and pavement marks. Make sight distance measurements.

Perform related work as required.

QUALIFICATIONS

Knowledges, Skills and Abilities:

Knowledge of drafting techniques, materials and tools, including basic familiarity with computer assisted drafting (CAD). Knowledge of standard engineering nomenclature and mathematics including geometry and trigonometry. Working knowledge of computer usage, terminology and spreadsheet and database applications. Basic knowledge of surveying techniques and equipment. Ability to make neat and legible technical drawings. Ability to perform mathematical computations quickly and accurately. Ability to read detailed maps, plans and specifications. Ability to follow instructions and established procedures. Ability to establish and maintain effective working relationships with internal staff and with persons in other agencies contractors and the public. Ability to manage data using both manual and computerized systems. Ability to contribute to the preparation of technical reports. Ability to perform field work including observations, measurements, data collection, and surveying activities.

Training and Experience:

Two years of experience performing technical office and/or field work in support of engineering activities. Such experience would normally be gained after completion of high school or equivalent (including two years of math and/or mechanical drawing). Vocational school or college training in the area of civil engineering technology or a closely related area may be substituted on a year-for-year basis for the experience. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledges, skills and abilities necessary to perform the duties of positions in this class will also be considered.

Necessary Special Qualifications:

Ability to meet the transportation and mobility requirements of the position.

DIVISION/DEPARTMENT: Multiple* Class Code: 677		Comp. Gr. <u>16</u> Range <u>11</u>
*Traffic Engineering, Water Utility		
	Approved:	John C. Hamilton Date Human Resource Director
		X
		X New Revised Title Change CG/Range Change Pers Board Approval 8/4/93