CLASS TITLE: Engineering Technician III

CHARACTERISTICS OF THE CLASS: Under general supervision, performs responsible engineering work on a variety of engineering projects in the field, office and laboratory; and performs related duties as required.

EXAMPLES OF DUTIES: Acts as instrument man on survey parties; establishes base lines and grade elevations at construction sites; assists resident engineers on small projects; checks forms, concrete, sewers, curbs, gutters, street pavements, catchbasins, earthwork, retaining walls, substructures and similar structures; evaluates construction work methods and procedures for compliance to City plans and engineering specifications; supervises a truck crew in testing for water leaks and measuring water main efficiency; monitors water pipes with aquatic and sound level meters; performs fire flow and pitometer tests; supervises water distribution systems control crews in routine maintenance of telemetering equipment; prepares geometric designs for street and intersection improvement; tabulates and analyzes traffic data; measures streets and intersections and prepares drawings of existing conditions; studies plans and applications for driveway permits; conducts traffic surveys for the placement, adjustment or removal of traffic regulating devices; prepares detailed sketches and field drawings; performs laboratory tests on soil and aggregate material to determine characteristics and properties; acts as quality control technician at concrete plants; develops and adjusts concrete proportioning mix designs; computes quantities for payments and develops preliminary cost estimates.

Makes layouts of traffic signal modernizations or new installations, street lighting layouts and adjustments or relocation of Fire Alarm and Police communication circuits and equipment; provides liaison with other utilities or contractors in regard to involvement or relocation of City electrical equipment; supervises and assists subordinate personnel in their work; inspects all drill rig operations during soil investigations to assure that the proper number of samples of the required quality are obtained and to make and record the necessary field observations; calculates the data obtained from tests to obtain index values to be used for design purposes and in-place values to be used for conformance criteria; visits plants or industries to check flow and assist in taking samples and making tests of waste water; assists in taking final measurements and elevations on new sewers in streets and alleys.

DESIRES MINIMUM QUALIFICATIONS:

Training and Experience. Two years of para-professional engineering experience in the field or office, or an equivalent combination of training and experience.
CLASS TITLE: Engineering Technician III (cont'd)

DESIRED MINIMUM QUALIFICATIONS:

Knowledge, abilities and skill. Good knowledge of the operation, adjustment and care of engineering instruments. Good knowledge of surveying, mathematics and the ordinary sources of general engineering information. Knowledge of modern construction methods and the strength and uses of construction materials.

Ability to prepare ordinary engineering details, plans, maps, estimates, specifications and computations. Ability to analyze and correct field engineering problems.

Skill in the use of drafting and surveying instruments.

December, 1987