CITY OF OMAHA
CLASS SPECIFICATION

CLASSIFICATION TITLE: CIVIL ENGINEER I

BARGAINING UNIT: CIV MANAGEMENT  
CODE NUMBER: 1460

PAY RANGE CODE: 18.3 MC  
REVISION DATE: 7/12/16

NATURE OF WORK:

This is entry level professional engineering work involving the following accepted engineering principles and practices in the preparation and review of designs and specifications for Public Works Department projects. It also involves assisting in the operation and maintenance of wastewater treatment facilities, conducting inspections and ordering repairs, designing and estimating the cost of projects, meeting with engineering professionals to discuss project plans and designs, and making inspections of projects in progress.

Other duties and responsibilities attributable to the classification of Civil Engineer I are identifying problems in streets, sewers, bridges, walkways, intersections, railroad crossings, and other public works structures; making recommendations for their repair, replacement, or redesign, and participating in the design of the plans and specifications involved; permitting and ensuring industrial compliance with emission standards; supervising divisional facilities; preparing reports; and conducting hearings to discuss projects in progress and their attendant regulations and results.

An employee in this classification works with some independence in the performance of duties; after a sufficient period of training and familiarization, may oversee the work of a number of subordinates and receives guidance from a superior.

ESSENTIAL FUNCTIONS: (Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)

Assists in the operation and maintenance of wastewater treatment facilities, inspecting for needed repairs, prioritizing repair or remodeling projects, designing and managing the projects, arriving at cost estimates, and conducting meetings with contractors, architects, and other engineering professionals to discuss project plans and specifications.

Inspects projects in progress and coordinates the work of City inspectors to ensure that plans and specifications are followed.

Conducts intersection studies, identifies capacity problems, and determines optimum signal timing plans.
Inspects conditions of streets, railroad crossings, bridges, sewers, and other city property, consults accident reports, and makes recommendations for repair, replacement, or redesign.

Plans, schedules, assigns, oversees, and evaluates the work of a staff of drafting technicians.

Supervises air quality testing and makes air dispersion models.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of the principles and practices of engineering design, drafting, construction, operations, and surveying.

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Knowledge of the factors needed to determine the types of field data needed as basis for effective design and the use of such data to develop complete construction plans.

Ability to interpret construction specifications and designs and make construction and material estimates.

Ability to develop project specifications, establish parameters for their completion, and manage the projects through to completion, conducting inspections and consulting with architects, contractors, and other engineering professionals.

Ability to oversee the work of a number of subordinate technicians, inspectors, and other city employees.

Ability to conduct engineering studies, identify problems, and make recommendations for their resolution.

Ability to meet with government officials, engineering professionals, interested groups, and individuals to discuss projects and regulations, answer questions, and resolve complaints.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to understand written or oral instructions.

Ability to adhere to safety policies, procedures, and guidelines.
Ability to sit from 51 to 75% of the time; and to climb, reach, balance, bend, stoop, squat, kneel, crouch, crawl, stand, walk, push, pull, lift, or type from 0 to 25% of the time.

Ability to use up to ten (10) pounds of force to move objects up to 33% of the time.

**EDUCATION AND EXPERIENCE:** *(The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)*

Bachelor's degree in Civil Engineering or a related engineering or engineering technologies field

OR

Six years of satisfactory engineering experience which has been approved by the Nebraska State Board of Examiners for Engineers & Architects.

**SPECIAL QUALIFICATIONS:**

Must become certified as an Engineer In Training prior to the end of the probationary employment period.

Must be able to transport oneself or coordinate transportation to work sites throughout the City during the course of the work day.

**WORKING CONDITIONS:** *(The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)*

Work is performed in an office setting; however, at times, an employee in this classification works outdoors in all weather conditions, amid noise requiring speaking above a normal voice to be heard, near moving mechanical parts or electrical currents, in high places or confined spaces, in conditions of dust, mists, odors, fumes, and gases.

**EQUIPMENT OPERATION:** *(Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)*

- Computer
- Copier
- Drafting Tools
- Thickness Gauge
- Printer
- Calculator
- Telephone
- Laboratory Equipment
- Anemometer

Previous Revision Date(s): 9/30/93
5/26/94