

CITY OF CEDAR RAPIDS POSITION PROFILE	JOB CODE #/TITLE: NB244 Utilities Process/Facilities Engineer
POSITION #/TITLE: 1694 Utilities Process/Facilities Engineer	Adopted: 05-99 Revised: 09-14

POSITION DESCRIPTION

Dept /Division: Utilities	Manager Level: Manager
Salary Plan/Description: NBU/Non-Bargaining Unit	Salary Grade: 17
Reports To Position #/Job Code #/JC Title: 0005/NB372/Utilities Engineering Manager	Dotted-line Reports To Position #/Job Code #/JC Title:
FLSA Status: Exempt	City Overtime Status (Employee Type): Exempt (Salaried)
Physical Demand Rating: Medium	Work Environment: Controlled
Pre-employment Testing: Drug and health screening after contingent offer.	Position Testing: Job fit assessment
Personal Protective Equipment: Eye, Head, Foot, Hearing, Gas Monitor	

General Statement of Duties

Manages and performs engineering review and design of water treatment, pumping, and other process systems at the Water and Water Pollution Control Plants, and remote sites (booster stations, lift stations, storage tanks). Coordinates and oversees work of staff including Utilities Process & Facilities Engineer I and Utilities Electrical Engineer. Follow-up on projects through construction with assistance of the Utilities Construction Manager and staff. Performs related work as required.

Distinguishing Features of the Class

Considerable leeway is granted for the exercise of independent judgment and initiative.

Examples of Essential Work (Illustrative Only)

Analysis of Capital Improvement needs, documentation of needs and study of alternate solutions;
 Prepares requests for proposals from engineers, contractors, consultants and vendors;
 Prepares contract documents for professional services agreements and construction contracts;
 Administers and manages preparation of plans and specifications for Water and WPC process and facility improvements and other Utilities Department Capital Improvement projects with consultants;
 Develops designs and provides design review of in-house and contracted design work to complete Utilities Department capital improvement projects;
 Coordinates these efforts with Water and WPC operations and maintenance leaders;
 Reviews and coordinates work of Engineering Technicians;
 Researches and evaluates equipment system modifications and operations strategies to optimize chemical feed and water treatment systems;
 Develops and directs pilot studies to evaluate equipment, water treatment and operational strategies;
 Monitors and inspects improvement projects for conformance with project specifications, City and regulatory standards;
 Designs and oversees the installation of treatment and process control systems to include chemical feed, SCADA and energy management systems;
 Conducts timely performance reviews and monitors performance and staffing needs;
 Attends meetings, conferences and workshops;

Performs all work duties and activities in accordance with City policies, procedures and safety practices;
Attends work regularly at the designated place and time;
Performs related work as required.

Required Knowledge and Abilities

Ability to read and interpret applicable federal, state and local laws and regulations governing Water and Water Pollution Control treatment standards;
Knowledge of water and waste water treatment processes and equipment;
Ability to communicate effectively and maintain working relationships with other City employees, supervisory personnel, contractors, developers, engineers, property owners and the public both orally and in writing, using both technical and non-technical language;
Ability to prepare accurate and reliable reports containing engineering calculations and specifications, findings, conclusions and recommendations;
Ability to review or assemble consulting and construction contract documents using standard documents used by the City;
Ability to operate a personal computer using program applications appropriate to assigned duties and responsibilities;
Ability to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology.
Ingenuity and inventiveness in the performance of assigned tasks.

Acceptable Experience and Training

Graduation from an accredited college or university with a Bachelor's Degree in civil, mechanical or environmental engineering or closely related field; and
Experience in engineering design and construction management; or
Any equivalent combination of experience and training which provides the knowledge and abilities necessary to perform the work.

Required Special Qualifications

Licensed as a Professional Engineer in the State of Iowa or with ability to obtain within six months of appointment.

Essential Physical Abilities

Requires the following, with or without reasonable accommodation:
Sufficient clarity of speech and hearing, which permits the employee to communicate effectively.
Sufficient vision, which permits the employee to perform engineering design and contract management tasks, observe and evaluate projects and processes and produce a variety of written and technical documents.
Sufficient manual dexterity, which permits the employee to operate computer keyboard and develop engineering designs and specifications.
Sufficient personal mobility, which permits the employee to inspect engineering and construction projects, including sites characterized by trenching and rough terrain.