## CITY OF CHATTANOOGA

# Classification Specification Title: Waste Resources Systems Engineer (Wastewater)

Department: Wastewater Pay Grade: WWFG.10E

Supervision Received From: FLSA Status: Exempt

Supervisory Responsibility For: Established: 6/29/07

**Revision Dates: 4/4/25;** 

3/25/25; 9/5/24; 10/20/23;

11/01/22

#### **CLASSIFICATION SUMMARY:**

The Waste Resources Systems Engineer requires proficiency in hydraulic engineering, especially system modeling experience. Incumbents in this classification are responsible for utilizing professional experiences and technical knowledge of wastewater collection and treatment systems, especially system modeling, to assist the teams they support in evaluations, investigations, planning, and feasibility studies of wastewater collection and treatment systems. Work requires limited supervision and the use of independent judgment and discretion.

#### SERIES LEVEL:

The Waste Resources Systems Engineer is a stand alone classification.

#### **ESSENTIAL FUNCTIONS:**

(The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.)

Manipulation and analysis of data sets, including flow meter, rain gauge, and water quality, using spreadsheets, tools, and GIS; perform wastewater conveyance systems and asset management data analytics.

Create or update and execute a variety of hydraulic models to assess existing problem areas, predict future issues, and develop solutions for planning and design projects; perform advanced modeling, analysis and planning of collection system; similar work for treatment system system a plus; evaluate pump station hydraulics; evaluate potential system improvements; formulate recommendations based on findings;

Work solo or in a team to investigate capacity and plan possible solutions for active and proposed projects;

Collaborates and coordinates activities with engineers, contractors, internal departments, the general public, and/or other interested parties regarding sewer issues.

Examines, reviews, and approves/denies new sewer connections.

Represents the division, department and/or the City at a variety of meetings, public events, training sessions, on committees, and/or other related events or groups in order to receive and convey information.

Uses, carries, and answers their cell phone for business purposes as determined by the assigned job duties and the department head.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers, and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Performs other duties as assigned.

DEPARTMENT SPECIFIC DUTIES (if any):

## MINIMUM QUALIFICATIONS:

Bachelor's Degree in Civil or Environmental Engineering and six (6) or more years of civil or environmental engineering experience with three (3) years directly-related experience in wastewater and collection system hydraulic modeling and planning, with progressively increasing responsibility; or any combination of equivalent experience and education.

#### LICENSING AND CERTIFICATIONS:

Professional Engineer License preferred Professional Engineer License must be issued in the State of Tennessee Valid Driver's License

### KNOWLEDGE AND SKILLS:

Civil and environmental engineering principles; wastewater collection systems; wastewater treatment plant systems desirable; hydraulic modeling & engineering experience for evaluations, investigations, planning, feasibility studies, and modeling of wastewater collection and treatment systems; experience with analysis of flow meter and rain gauge data; proficiency with advanced modeling, data management, and related software packages (e.g., Innovyze, AutoCAD Sanitary and Storm Analysis (SSA), EPA-SWMM, ArcGIS, and Excel); compiling and evaluating technical data, statistics, and information; conducting studies; interpreting and applying applicable laws, ordinances, codes, rules, regulations, policies, and procedures; and, communication and interpersonal skills as applied to interaction with coworkers, supervisor, and the general public, sufficient to exchange or convey information and to receive work direction.

#### PHYSICAL DEMANDS:

Positions in this class typically require: reaching, fingering, grasping, talking, hearing, seeing, and repetitive motions.

#### WORK ENVIRONMENT:

Light Work: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rated for Light Work.

Incumbents may be subjected to vibrations, fumes, dust, extreme temperatures, workspace restrictions, and infectious diseases.

# SPECIAL REQUIREMENTS:

Safety Sensitive: N

Department of Transportation - CDL: N

Child Sensitive: N

The City of Chattanooga, Tennessee is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourage both prospective and current employees to discuss potential accommodations with the employer.