

# DOWNERS GROVE SANITARY DISTRICT

## JOB DESCRIPTION

TITLE: SEWER SYSTEM ENGINEERING TECHNICIAN

FLSA: Nonexempt

PAY RANGE: HOURLY I

### GENERAL SUMMARY

Responsible for maintenance of programs relating to District's comprehensive infiltration and inflow removal and sewer system rehabilitation policy and providing technical assistance to the operation and maintenance of the sanitary sewer system. Reports directly to the Sewer System Maintenance Supervisor.

### PRINCIPAL DUTIES AND RESPONSIBILITIES

- 1) Assists with all activities related to flow basin rehabilitation program including evaluate system data, recommend repairs, customer service, construction administration and program monitoring.
- 2) Assists with all activities related to administration and monitoring of Building Sanitary Service Repair Assistance Program, Overhead Sewer Program and Reimbursement Program for Sewer Backups Caused by Public Sanitary Sewer Blockages.
- 3) Responsible for flow metering program including meter installation, meter removal, data retrieval, data review and analysis, and report preparation.
- 4) Assess pipe and manhole conditions from television inspections using Pipeline Assessment Certification Program (PACP, MACP, LACP) and recommend appropriate rehabilitation
- 5) Assist in the design and review of plans and specifications for the construction of sanitary sewers into unsewered areas, special assessment areas, new construction and sewer replacements.
- 6) Review subdivision and commercial development engineering plans for sanitary sewer system.
- 7) Maintain Geographic Information System (GIS) database within ESRI ArcMap software and LUCITY infrastructure management software.
- 8) Analyze and measure results of sewer system operations in order to effectively assist with planning and prioritizing future work schedules.
- 9) Assist with construction management for sanitary sewer system projects.
- 10) Prepare cost estimates for sewer system projects.
- 11) Perform sewer maintenance activities including responding to sewer backups and high flow conditions, preventative maintenance flushing and manhole inspections and repairs.

- 12) Operate combination sewer cleaning truck, camera for televising building service lines, and other equipment used in the inspection, maintenance, rehabilitation and repair of the sewer system.
- 13) Assist with monitoring sewer construction and maintenance contractors for compliance with contract standards.
- 14) Assist with planning, evaluation and coordination of preventative and corrective maintenance on the sewer system.
- 15) Assist with inspection of all connections and disconnections (including groundwork, finals, blocking and repairs), construction of sanitary sewers and related appurtenances (including air testing, lamping and manhole inspections) and work by contractors hired by the District or other utilities.
- 16) Assist with code enforcement inspections and activities including illegal connections, grease traps and triple basins and management of grease trap monitoring program, including inspections, correspondence to grease trap cleaners and restaurant owners.
- 17) Perform sewer investigations including marking District facilities for JULIE, dye tests, smoke tests, compliance investigations, flood testing and flow measurements.
- 18) Provide technical assistance to sewer system employees.
- 19) Assist with sanitary sewer cleaning and televising as needed.
- 20) Answer questions and provide information to the public. Respond to complaints and recommend and implement corrective action. Maintain a high level of customer service, problem solving and customer awareness.
- 21) Maintain required records and database of sewer system activity, including data entry, analysis and report preparation, in LUCITY software, ESRI ArcMap, Access and/or Excel, as appropriate.
- 22) Update sewer system atlas maps.
- 23) Develop or recommend new practices to insure the efficient operation of the sewer system.
- 24) Recommend and/or prepare specifications for major equipment and material purchases.
- 25) Provide engineering assistance to projects related to the Wastewater Treatment Center and pumping stations.
- 26) Must be available to respond in the field and on-call basis by phone on a 24-hour basis, seven days a week, on a rotating basis, in order to respond to emergency situations.
- 27) Must be available to assist with emergency operations as necessary.
- 28) Responsible for special projects as assigned by the Sewer System Maintenance Supervisor.

## KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

- 1) Two years of college-level course work in engineering or related field.
- 2) Bachelor's or Associate's degree from an accredited college or university.
- 3) Must live within a 30-minute travel time from the District's Wastewater Treatment Center.
- 4) Good working knowledge of District ordinances, practices and procedures, and the District collection system. This knowledge is normally acquired with one year of work experience.
- 5) Knowledge of construction materials, methods and applicable laws, survey techniques and engineering design procedures.
- 6) Skills in the use of computers and software, including knowledge of ESRI ArcMap GIS, Google Earth, and LUCITY sanitary sewer system software, Access, Excel and Word.
- 7) Requires successful completion of Pipeline Assessment Certification Program (PACP, MAPC, LAPC) within one year of start of employment.
- 8) Ability to operate combination sewer cleaning truck and camera for televising building service lines normally acquired with six months of work experience.
- 9) Ability to read and understand plans and specifications.
- 10) Knowledge of methods, use of equipment and practices in locating sewer lines normally acquired with six months of work experience.
- 11) Skills in establishing and maintaining effective working relationships with coworkers, residents, contractors, and other governmental agencies.
- 12) Interpersonal skills and abilities to communicate effectively both orally and in writing with the public, co-workers, contractors and outside agencies, including under difficult circumstances.
- 13) Skills in project implementation, organization and teamwork.
- 14) Ability to effectively implement multiple projects and meet deadlines.
- 15) Ability to think independently, exercise judgement and initiative and prioritize all sewer system operations effectively, economically and efficiently.
- 16) Ability to prepare analytical, accurate and concise reports and maintain required records and database of sewer system activity.
- 17) Knowledge of budgeting and purchasing procedures.
- 18) Requires a minimum State of Illinois Class B Commercial Driver's License (CDL) with Full Air Brakes (no restriction) and a Tank (N) endorsement to be achieved within one year of employment.

## PHYSICAL ABILITIES REQUIRED

- 1) Ability to operate required office equipment in order to send and receive information with necessary optical, auditory, and manual dexterity.
- 2) Ability to use a keyboard to enter, retrieve, or transform words and data.
- 3) Ability to closely examine computer screen or written reports and proofread and check documents for errors.
- 4) Ability to walk, stand, or sit for an hour or more at a time for office related activities. Ability to walk, stand, sit, bend, and climbing for field work including work in and around crawlspaces, manholes, trenches, construction and job sites and the Wastewater Treatment Center.
- 5) Lifting, pulling and pushing objects on a daily basis, including manhole covers weighing 150 pounds, barricades, hoses, pipe and other construction materials, and tools and equipment.
- 6) Valid State of Illinois Driver's License and ability to operate a motorized vehicle on public roads and highways to visit work sites.
- 7) Ability to identify and distinguish colors.
- 8) Ability to work in confined spaces such as but not limited to manhole structures and large diameter pipes. Confined Space Training to be completed within one year of employment. Must be able to operate and maintain manhole entry and safety equipment and atmospheric monitoring devices.

## WORKING CONDITIONS

Varied work environment, involves both office work and outdoor work under all weather conditions and during day and night hours. Outdoor work includes exposure to dirt, noise, wastewater and the like. Must be available for emergency operations as required.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.

1/17/23