ENGINEERING OPERATIONS LEADWORKER 3

CLASS DESCRIPTION

General Responsibilities:

This is highly responsible skilled project coordination and technical work in leading a crew consisting of Street and Sewer Machine Operator 3's, lower level Machine Operators and maintenance workers in the installation and/or reconstruction of the City's sanitary sewer, storm sewer and drainage facilities and other city projects. Employees in this classification will perform skilled project coordination work, and utilize independent judgment and discretion in directing complex, larger scale projects; which can include closed landfills, difficult and complex excavation and concrete work, complete installations, and building demolitions. The work is characterized by direct responsibility and accountability for all phases of assigned and emergency projects to include: scheduling projects, determining the materials and equipment needed; obtaining necessary utility clearances; determining the most cost-effective and timely methods to be used in making repairs; directing the crew in all phases of the work; and maintaining the safety of the crew and the general public. The work is performed under the general supervision of a Public Works General Foreperson. Employees in this class are expected to exercise considerable judgment and discretion in many situations where supervisory input is not readily available.

The complexity and scope of projects assigned to this position along with the higher level planning, coordination and oversight of all phases of work are what distinguish this position from lower level positions.

This position is not part of an automatic progression series. Rather, placement as an Engineering Operations Leadworker 3 is based on a competitive process or position study and the needs of the department.

Examples of Duties and Responsibilities:

Plan and coordinate repair and installation work related to City sanitary and storm sewer systems. Receive a list of upcoming projects, prioritize, and schedule accordingly. Conduct pre-work site visits. Determine the location of necessary repair by reviewing relevant reports, maps and records. Determine necessary equipment, tools and materials for assigned projects. Determine cost-effective methods and materials to be used. Purchase materials as needed. Contact utility representatives, and consider utility locations, in making necessary repairs (i.e., equipment placement, necessity for hand-digging, etc.). Mark location of repair in field and related facilities in vicinity.

Lead a crew of skilled Street Machine Operator 3s, other machine operators and maintenance workers in the complete reconstruction and/or new the installation of: underground sanitary and storm sewer facilities (i.e., mains, connections, services, leads, etc.) and structures and related appurtenances; storm drainage facilities and related appurtenances; and concrete sidewalk, curb and gutter, pavement, culverts, retaining walls, apron end walls, box culverts, wing walls, cunettes, flumes, access structures, catch basins, inlets, or other structures.

Oversee and participate in related crew activities to include directing and performing skilled equipment operations (i.e., backhoe, crane work, etc.) and breaking the street. Cut and replace damaged pipe using appropriate tools, couplings, etc. Oversee backfilling and compaction. Provide for resurfacing and complete concrete repairs. Oversee emergency repairs as necessary.

Be familiar with and follow the requirements of the City of Madison's "Standard Specifications for Public Works Construction."

Train and orient new employees. Monitor the work of assigned crew and provide feedback to both the employees and the supervisor.

Maintain safe conditions at the job-site to include: establishing appropriate traffic control measures, avoiding overhead or underground hazards, and monitoring the use of employee personal safety equipment (e.g., vests, hard hats). Provide for adequate shoring and other crew safety considerations.

Maintain accurate paper and computer records, and submit required documentation in a timely manner.

Perform snow removal work as assigned.

Perform related work and special projects as required.

QUALIFICATIONS

Knowledge, Skills and Abilities:

Thorough knowledge of the methods, materials, equipment and tools (i.e., dump truck, trailer, skidsteer, chop shop, chain cutter, pumps, generators, compactor, 4-gas meter, laser level, etc.) used in the installationand repair of municipal sanitary and storm sewer systems; to include related principles, procedures, terminology, equipment and tools. Thorough knowledge of applicable safety practices and equipment. Thorough knowledge of state regulations relative to confined entry and trench entry. Working knowledge of related first aid principles and CPR. Working knowledge of and ability to use computer software applicable to the duties of the position. Ability to provide for crew and related traffic safety considerations. Ability to maintain a safe job-site. Ability to use computerized GIS records to identify and locate underground sanitary and storm facilities. Ability to interpret and apply prints and diagrams of under-ground utilities. Ability to effectively plan, assign, and lead complex work of employees and crews. Ability to communicate effectively both orally and in writing. Ability to understand and effectively carry out oral and written assignments, and to make independent judgments and decisions when necessary. Ability to layout the work and lead a crew in all phases of the installation, maintenance, and repair of municipal sanitary and storm sewer systems. Ability to maintain effective working relationships with representatives of utility companies, Fire Department officials, the general public, supervisors and co-workers. Ability to successfully work with multicultural communities. Ability to operate a motor vehicle, equipment and tools used in the installation and repair of municipal sanitary and storm sewer systems. Ability to setup and use pipe and rotary laser levels. Ability to use machine control systems. Ability to interpret grade stake information. Ability to work with Project Engineer, Construction Supervisor and Surveyor to develop and implement field solutions to sanitary and stormwater problems. Ability to keep accurate paper and computer records, and make oral and written reports. Ability to perform manual tasks involving physical strength and endurance under variable weather conditions. Ability to maintain adequate attendance.

Training and Experience:

Generally, positions in this classification will require:

Five years of directly related experience performing responsible semi-skilled to skilled work in the installation, maintenance, and repair of municipal sanitary and storm sewer systems. Such experience would include at least one year of crew leadership normally gained as an Engineering Operations Leadworker 2 level within the City of Madison Engineering Division or equivalent levels in other sewer utilities or private contracting firms engaged in sewer construction. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills and abilities necessary to perform the duties of the positions in this class will also be considered.

Specific training and experience requirements will be established at the time of recruitment.

Necessary Special Qualifications:

Possession of a Class A Commercial Driver's License with an N endorsement upon appointment.

Physical Requirements:

Employees in this position must be able to lift/carry objects weighing up to 75 pounds and must be capable of lifting heavier objects with another employee. This position requires a high percentage of work outdoors in all types of weather at various times of day and night while walking and standing. In addition, employees must be able to frequently bend, twist, squat, climb and reach for extended periods of time and work in confined spaces.

Employees must be able to respond to emergencies outside of scheduled work hours, including nights, weekends and holidays.

Department/Division	Comp. Group	Range
Engineering / Sewer	15	10

Approved:			
	Brad Wirtz	Dat	te
	Human Resources Director		