

Job Description

Human Resource Use Only

Position Number: 10033

Step/Grade: J

Effective Date: 06-2016

Revision Date: 05.2026

POSITION IDENTIFICATION

Position Title: Surveyor/Engineering Technician
Department: Department of Public Works
Status: Full-time Non-exempt
Workweek: Monday - Friday

SUPERVISORY RELATIONSHIPS

Reports to: Engineering Division Manager
Directly Supervises: Seasonal Employees

POSITION PURPOSE

This position performs a variety of paraprofessional work in Civil Engineering requiring considerable skills and advanced knowledge in digital (CADD Open Site Designer survey software) and hand drafting, advanced surveying (including preliminary survey work and data collection, stake out and as-builts), complex construction inspection and engineering design calculating quantities, writing special provisions. Employees in this class must be familiar with assessment policies, applicable ordinances and state statutes, state and local construction specifications, and have a deep understanding of construction means and methods. This position is expected to perform routine tasks independently. Acts as Senior Survey Crew Chief, supervises two summer seasonal engineering students and is involved with the interviewing and hiring process for the seasonal employees.

ESSENTIAL DUTIES

- Coordinate and perform all surveying activities, including property, boundary, topographic, construction staking, as-built, line, and grade surveys
- Determine property rights and ensure code compliance
- Prepare and review legal descriptions, plats, maps, site plans, deeds, and survey documents
- Draft site layouts and designs using CADD and GIS systems
- Maintain and update the City benchmark system and ArcGIS database
- Interpret and revise construction plans to reflect field conditions
- Establish locations and elevations for construction of streets, utilities, sidewalks, and related infrastructure
- Perform topographic, route, and lot surveys to support project design
- Calculate and coordinate staking and layout for municipal projects
- Supervise survey crews and ensure compliance with City ordinances and regulations
- Produce accurate construction drawings using CADD (OpenSite Designer/MicroStation) and GIS
- Prepare reports, documentation, and correspondence using standard office software

- Update construction plans and complete as-builts using robotic total station data collection
 - Perform engineering calculations, including alignment, grading, and pipe flow analysis
 - Train staff in engineering design software and surveying practices
 - Prepare special assessments, cost estimates, and bid quantities for public works projects
 - Oversee cross-sectioning and topographic survey operations
 - Represent the City at public meetings, including Public Informational Meetings (PIMs) and agency coordination
 - Conduct final inspections and prepare punch lists for completed projects
 - Inspect construction work for compliance with plans, specifications, and contract requirements
 - Verify material quantities and ensure adherence to project specifications
 - Conduct field investigations and prepare technical reports
 - Interpret plans and provide information to property owners, developers, and stakeholders
 - Collaborate with City departments to resolve field issues such as drainage, utilities, and traffic concerns
 - Review sewer inspection reports and recommend repair or replacement strategies
 - Review and approve Certified Survey Maps (CSMs) and plats of survey
 - Coordinate utility locating services and verify underground infrastructure marking
 - Assist with pavement condition ratings (PASER/WISLR) and related reporting
 - Review and provide feedback on subdivision plats and roadway design plans
 - Meet with businesses and residents regarding upcoming construction projects
 - Prepare drawings and plans for various City departments
 - Locate and mark City right-of-way and property lines
 - Adjust grades and design elements in the field to address construction challenges
 - Support project research through data collection, plan review, and field records analysis
 - Coordinate with public agencies, utilities, consultants, and contractors
- Maintain and manage survey and inspection equipment

OTHER DUTIES

- Other duties as assigned

MINIMUM POSITION QUALIFICATIONS

Education:	Minimum requirements include an Associate Degree in Surveying or Civil Engineering or any equivalent combination of experience and training which provides the required knowledge, skills, and abilities for the position as determined by the City.
Experience:	Three years or more experience as a crew chief is preferred.
Certifications/Licenses:	Must possess a valid motor vehicle operator's license issued by the State of Wisconsin. Must be trained in confined space entry.

KNOWLEDGE, SKILLS, & ABILITIES

- Ability to read, interpret, and prepare legal descriptions
- Proficient in Microsoft Word, Excel, Access, email, CADD, ArcGIS, and Windows

- Ability to interpret design/specification manuals, ordinances, laws, codes, and construction plans
- Strong written and verbal communication skills
- Ability to prepare drawings from field notes
- Experience preparing surveys, plats, site plans, reports, budgets, and title documents with proper formatting
- Ability to interpret maps, plans, deeds, easements, aerial photos, and related documents
- Effective communication with staff, consultants, contractors, and the public
- Strong math skills (algebra, geometry, trigonometry) and engineering calculations
- Ability to read charts and graphs
- Exercises sound judgment, professionalism, and problem-solving skills

BACKGROUND CHECKS

Condition of Employment

PHYSICAL DEMANDS

Manual Dexterity: While performing the duties of this job, the employee is regularly required to stand, walk, use hands and fingers to handle or feel; reach with hands and arms; stoop, kneel, carry, twist, crouch; talk and hear. The employee is occasionally required to sit, climb, balance, or smell, and may be required to work in high places.

Physical Effort: The employee must regularly lift and/or move up to 25 pounds, frequently lift and/or move up to 50 pounds, occasionally lift and/or move more than 100 pounds.

Working Conditions: While performing the duties of this position, the employee is regularly exposed to outdoor weather conditions; regularly walks over uneven terrain such as construction sites; in close proximity to heavy construction equipment and trucks during site inspection work. The noise level in the office work environment is generally low; however, exposure to very loud noises may occur during the surveying and/or inspection of construction sites as well as being exposed to fumes and airborne particles. The employee must be able to adjust from one schedule to another at short notice and be able to maintain attention to task in overtime situations. Ability to work under adverse weather conditions.

This position description has been prepared to define the general duties of the position, provide examples of work and to detail the required knowledge, skills and abilities as well as the acceptable experience and training for the position. The description is not intended to limit or modify the right of any supervisor to assign, direct, and control the duties of employees under supervision. The City of Manitowoc retains and reserves any and all rights to change, modify, amend, add to or delete from any portion of this description in its sole judgment.

This job description is not a contract for employment. The City of Manitowoc 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 encourages both prospective and current employees to discuss potential accommodations with the employer.