Job Description

Human Resource Use Only

Position Number: Step/Grade Effective Date:

POSITION IDENTIFICATION

Position Title: CITY SURVEYOR TECHNICIAN

Division: Department of Public Infrastructure – Engineering Division

Status: Full Time Hourly
Workweek: Monday - Friday

SUPERVISORY RELATIONSHIPS

Reports to: Engineering Division Manager Team Leader

Directly Supervises: Two Summer Seasonal Employees

POSITION PURPOSE

This position performs a variety of paraprofessional work in Civil Engineering requiring considerable skills and advanced knowledge in digital and hand drafting, advanced surveying, complex construction inspection and engineering design in the office and in the field. 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 with reference to a supervisor only when difficult or unusual problems occur.

ESSENTIAL DUTIES

- Coordinates, directs and performs surveying such as property surveys, field, site, as-builts, line and grade surveys
- Determines property rights and code compliance
- Prepares, reviews or directs the preparation of legal descriptions, plats, maps and site plans, property surveys, deeds and topographic maps
- Drafts site surveys
- Disseminates survey information to appropriate individuals
- Prepares survey reports
- Maintains City's benchmark system
- Interprets, adjusts, and revises construction plans to meet existing field conditions
- Sets location and elevation for construction of sidewalks, sewers, watermain, streets, ponds, driveways, etc. for contractors and City crews
- Establishes State plane coordinates of points for mapping areas of the City
- Makes topographic, route, and lot surveys prior to making construction plans
- Calculates methods of staking and layout for municipal projects and/or improvements
- Coordinates staking and layout

- Effectively supervises subordinates and directs compliance with all City ordinances and regulations
- Performs advanced drafting of sewer, street, sidewalk, ponds, and other construction projects while displaying accuracy and neatness using Computer Aided Drafting and Design (CADD) System and GIS system
- Uses a personal computer to prepare various documents using spreadsheet, word processing, email, database and web related programs
- Assists with the maintenance of the geographic information system
- Updates original construction plans from field notes and completes as-builts
- Performs engineering calculations accurately including super-elevation, spiral alignment and pipe flow
- Trains personnel in use of Engineering Design software
- Prepares special assessment cost for projects
- Oversees and directs cross-sectioning work of all survey crews
- Plots, surveys, and draws field notes to scale showing alignment, topography and profile
- Represents the City's interests at public meetings, DOT and other State agency meetings
- Maintains status in Associations and keeps methods and means up to date with respect to accepted standards and technological improvements
- Performs final walk through inspections and prepares punch lists along with the City Inspector at the completion of Public Works Projects
- Inspects construction of streets, sewers, curb and gutter, bridges, ponds, signals and sidewalks for compliance with the plans and specifications
- Determines if material and quantities used comply with contract specifications
- Conducts field investigations and writes necessary reports
- Estimates bid quantities and construction costs for sewer and paving projects
- Interprets plans and drawings to interested property owners, developers, consultants, other engineers, etc. who desire information regarding right-of-way lines, proposed and existing sewers, street widths, sidewalk set-backs, etc.
- Works directly with <u>personnel from</u> the Department of Public <u>Infrastructure's Operations</u> and <u>Parks Divisions Works supervisory personnel</u> to resolve field problems including sewer backup, drainage complaints, traffic issues, signage and current and future public projects
- Reviews televising inspection reports and videotapes for sanitary and storm sewers and makes recommendations as to which sewers are in need of repair or replacement
- Checks and reviews all CSM's from surveyors (RLS)
- Works with <u>the our City's</u> hired locator for marking <u>the City's our city</u> underground utilities, including sanitary <u>sewer</u>, storm <u>sewer</u>, <u>sewerall</u> laterals, <u>traffic signals</u> and private utilities. Also, updates the contract and verifies monthly <u>for</u> invoices. <u>and contracts</u>
- Assists in preparation of <u>the</u> biennial field update <u>(pavement condition ratings)</u> of <u>the</u> <u>City's</u> PASER-WISLR information for WI<u>S</u>-DOT

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 Management.

Experience: Five years or more experience as a crew chief.

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 write legal descriptions.

The candidate should have experience in the use of personal computers. Ability to utilize personal computer programs including Microsoft Word, Excel and Accessword processing, spreadsheet, database, email, CADD, ARCGIS and experience with the Windows Operating System is necessary.

Ability to read and interpret design manuals, specification manuals, City Ordinances, State laws, building codes, and any other necessary codes or regulations; ability to read and interpret construction plans and specifications; ability to present facts and recommendations effectively in written and oral form; ability to prepare drawings from field notes.

Ability to prepare a variety of documents such as legal descriptions, plats of surveys, certified survey maps, subdivision plats, site plans and certified survey map reviews, budget requests and projections, title searches, field notes, and various reports using prescribed format and conforming to all rules of punctuation, grammar, diction and style.

Ability to use and interpret surveying text, standard specifications, tax key, subdivision, zoning, flood plain, topographic, and certified survey maps, building, utility, and construction plans, deeds, easements, mortgages, aerial photos, and policy and procedure manuals.

Ability to communicate effectively with consultants, surveyors, contractors, attorneys, architects, title companies, the County Register of Deeds, City personnel and the general public to convey or exchange information including giving assignments and/or directions to subordinates and receiving instructions from supervisors.

Must have the knowledge of algebraic equations, geometry, and trigonometric mathematical procedures and the ability to perform advanced engineering calculations accurately. The ability to read and interpret charts and graphs, etc.

Must exercise good judgment at all times; must have the ability to maintain a professional attitude and a reasonable demeanor during all conversations; must have the ability to discuss and resolve problems in a tactful and professional manner.

Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

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.