

CITY OF HELENA



Position Title: Traffic Signal/I&C Technician

Department: Public Works

Division: Streets & Traffic/Fleet

Grade: 141

FLSA: Non-Exempt

The City of Helena is an equal opportunity employer. The City shall, upon request, provide reasonable accommodation to otherwise qualified individuals with disabilities.

Job Purpose:

The purpose of this position under general direction of the Streets & Traffic/Fleet Superintendent is to perform a variety of semi-skilled and skilled work involved in the installation, maintenance, and repair of electrical and electronic systems including water and waste water treatment controls and devices, traffic signals and traffic control equipment and radio communications equipment. The employee is heavily involved in design, construction and project management of new installations.

Essential Duties: *These job functions are the essential duties of the position and are not all-inclusive of all the duties the incumbent may be assigned.*

Instrumentation and Controls Maintenance

This position performs semi-skilled and skilled electrical and electronic work involved in the preventative and corrective maintenance, modification, field and bench repair, testing, and installation services for water treatment, water storage systems and facilities and waste water treatment systems. Install, maintain, repair and replace electronic and electrical equipment including pumps, telemetric and electrical panels, electrical valves, monitoring systems, auxiliary power supply systems, chargers, meters, pressure switches and other equipment involving high and low voltage. Diagnose, repair, and program PLC's. Control logics and ladder logics.

Traffic Signal Maintenance

This position perform semi-skilled and skilled electrical and electronic work involved in the preventative and corrective maintenance, modification, construction, field and bench repair, testing, and installation services for traffic signals and traffic control equipment. Install, maintain, repair and replace electronic and electrical equipment including pumps, telemetric and electrical panels, electrical valves, heating units, security lights, batteries, chargers, rectifiers, meters, and other equipment involving high and low voltage.

Instrumentation and Controls Maintenance/Traffic Signal Maintenance

Assist in planning work projects, prepare estimates of time and materials needed to perform assigned repairs and maintenance; select appropriate equipment and materials to complete the work according to specifications, verbal instructions and established procedures. Establish cost estimates, develop bid specifications and solicit project bids for specific projects. Assist in the hire of contractors, manage assigned projects from design through construction and final inspection and submit payment of claims.

Prepare and maintain necessary records and reports and prepare necessary bills for work performed. Participate in inventory control of signal hardware. Operate a variety of tools and equipment including aerial bucket truck, hand tools, shop tools, testing equipment, vehicular equipment and other specialized equipment used in the performance of the job related tasks.

Assist in developing capital projects and planning the budgets. Perform work in accordance with safety regulations, guidelines, and practices.

Radio Communications Technician

Participation in Public Works two way radio system to include but not limited to liaison with Lewis & Clark County and Montana State radio personnel. Perform installation and programming of two way radios in Public Works Department vehicles and equipment.

Safety Related Duties

Abide by the City of Helena and department/division work practices established for specific job assignments and occupations. Report occupational injuries, illnesses and near misses immediately to supervisor. Follow supervisor instructions for obtaining first aid and/or medical attention. Participate in accident investigations as requested by the supervisor. Participate fully in safety training, suggest improvements in safety training requirements or programs to the supervisor or the safety committee.

Identify unsafe work conditions and unsafe practices. Correct hazards or report them to the supervisor or safety committee as appropriate.

Essential Knowledge, Skills and Abilities Related to this Position

- Time management and organizational practices
- Decision making and problem solving skills
- Self motivated and highly productive
- Analytical, mathematical, algebra and geometry skills
- Principles, theory, and standard practices of electricity and electronics.
- Materials, methods, practices and equipment used in electrical and electronic installation, maintenance, and repair.
- Pertinent Federal, State, and local electrical codes.
- Occupational hazards and standard safety precautions necessary in the work.
- Safe driving principles and practices.
- Operate a variety of electrical and electronic maintenance, repair and testing tools and equipment in a safe and effective manner.
- Perform heavy manual labor for extended periods of time in all types of weather.
- Learn to correctly interpret and apply the policies, procedures, laws, and regulations pertaining to assigned programs and functions
- Troubleshoot a variety of electrical and electronic malfunctions.
- Apply principles of logic to define and solve complex problems.
- Operate a computer and software, word processing, spreadsheets, email and internet.
- Read, interpret, and apply a wide variety of technical information from manuals, drawings, specifications, layouts, blueprints, and schematics.
- Exercise good judgment, flexibility, creativity, and sensitivity in response to changing situations and needs.
- Communicate clearly and concisely, both orally and in writing.

Physical Demands & Work Environment:

Ability to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, climb, lift 50 lbs and work from heights. Exposure to cold, heat, noise, outdoors, vibration, confining work space, chemicals, explosive materials, mechanical hazards, and electrical hazards. Ability to travel to different sites and locations and available for emergency call out.

Experience and Training Guidelines and Requirements:

Any combination equivalent to experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Four years of experience in the installation, maintenance and repair of electrical and electronic equipment and systems.

Training:

Equivalent to the completion of the twelfth grade supplemented by vocational training in electrical and or electronics field.

License or Certificate:

Possession of a Signal Technician Level I Certification issued by IMSA within six (6) months of hiring date.

Possession of a Signal Technician Level II Certification issued by IMSA is required within 36 months of date of hire.

Must possess a valid driver’s license with acceptable driving record at the time of hire and have the ability to obtain a valid Montana driver’s license within six months of hire.

Supervision Received

Supervised by the Streets & Traffic/Fleet Superintendent

Supervision Exercised

None

The specific statement shown in each section of this position description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

After reading this job description, as of this date would you require any accommodation to perform these duties?

YES **or** **NO**

Employee’s Signature: _____

Date: _____

Updated January 3, 2013