

**PIERCE PEPIN COOPERATIVE SERVICES
ELLSWORTH, WISCONSIN**

POSITION DESCRIPTION

BROADBAND NETWORK GIS DESIGNER

DEPARTMENT: Operations

STATUS: Salaried, Exempt

I. POSITION SUMMARY

The Broadband Network GIS Designer supports the planning, design, and implementation of fiber optic networks through detailed GIS-based design and field validation. This position develops and maintains accurate network maps, performs on-site route assessments, and collaborates with contractors, engineers, and stakeholders to ensure efficient and compliant network construction. This position assists in resolving right-of-way challenges, verifies design accuracy during and after construction, and maintains up-to-date documentation and as-built records. This role plays a key part in ensuring high-quality broadband infrastructure that meets technical, regulatory, and project standards.

II. REPORTING RELATIONSHIPS

- A. Reports to: Chief Operating Officer
- B. Supervises: No Direct Reports

III. MAJOR RESPONSIBILITIES AND DUTIES

Essential Functions – Fiber Network Design

1. Develop detailed fiber optic network designs using GIS tools.
2. Construct and edit fiber route designs, incorporating both aerial and underground infrastructure.
3. Utilize Vetro Fiber Mapping or similar software to manage network planning and design.

Essential Functions – Field Work and Validation

1. Conduct field ride-outs to assess and validate proposed routes.
2. Confirm placement of fiber lines, pedestals, splice cases, vaults, and other network elements.
3. Perform real-time design edits in the field as necessary.

Essential Functions – Stakeholder Engagement

1. Coordinate with customers, landowners, municipalities, and other stakeholders to ensure minimal disruption during fiber placement.
2. Resolve right-of-way or easement challenges with assistance from other employees.

Essential Functions – Collaboration and Vendor Support

1. Work closely with construction contractors, consultants, and equipment vendors.
2. Support project managers in ensuring design and construction align with funding requirements and project timelines.

Essential Functions – Quality Assurance

1. Provide QA/QC oversight on fiber buildouts, ensuring design accuracy and adherence to specifications.
2. Document and record all “as-builts” in the mapping system.
3. Assist with updating GIS databases to reflect current and completed projects.

All essential functions must be done in a method that helps advance the effectiveness and efficiency of the cooperative, providing overall value to the cooperative and ensuring that activities help support the cooperative’s efforts to improve the lives of our members.

General Requirements

1. Provide world class member and customer experiences.
2. Cooperate with all employees in maintaining good working relationships.
3. Demonstrates cooperative shared values.
4. Learns and complies with all Cooperative policies, rules, and regulations.

The **Broadband Network GIS Designer** shall be required to perform any other duties assigned in order to fulfill the objectives of the Cooperative.

The above statements are intended to describe the general nature and level of work being performed by people assigned to this classification. They are not intended to be construed as an exhaustive list of all responsibilities of personnel so classified.

IV. EXTERNAL RELATIONSHIPS

- A. Member-Consumers: To assist and to respond to questions and inquiries.
- B. General Public: Maintains good relations in all contacts with the general public.
- C. Vendors

POSITION SPECIFICATIONS

BROADBAND NETWORK GIS DESIGNER

Job Knowledge and Training and Experience:

Education: High school diploma or equivalent; bachelor's degree in GIS, Geography, Engineering, Telecommunications, or relevant degree (or equivalent work experience) is preferred.

Experience:

- 2–5 years of experience in GIS mapping, network design, or telecommunications infrastructure (fiber preferred).
- Experience using GIS platforms such as Esri ArcGIS, ArcGIS Pro, or Vetro Fiber Mapping (or similar network design software) is preferred.
- Fieldwork experience with fiber optic or utility networks is desirable.
- Familiarity with NTIA BEAD-funded project and associated compliance requirements.
- Knowledge of permitting and right-of-way acquisition processes.

Abilities and Skills:

- Familiarity with fiber optic design principles, including route planning, splice points, and network topology.
- Hands-on experience conducting field validation or inspections to verify network layouts and site conditions.
- Understanding of aerial and underground construction practices, including permitting, right-of-way, and easement coordination.
- Strong spatial reasoning – ability to visualize 3D concepts in a 2D design environment.
- Ability to work independently and collaboratively across diverse teams.
- Ability to read and interpret engineering drawings, construction prints, and as-built documentation.
- Proficiency with Microsoft Office and GIS data management for reporting and project tracking.
- Ability to report to executive teams on progress.

Equipment Operated: Position utilizes laptops and standard office and field equipment in the completion of their duties.

Physical and Mental Effort:

- Must be able to sit, walk and/or stand for prolonged periods, up to 7 hours in an eight-hour day, with or without back support.
- May be asked to perform light physical work.
- Must be able to communicate effectively on the telephone and in person to provide information and assistance. Must be able to make group presentations.
- Must be able to move throughout the buildings, from building to building and throughout the surrounding area. Must be able to move throughout the service area, including ability to perform work in the field.
- Must be able to use computers and office equipment.
- Must have dexterity and hand/eye coordination necessary to use computer keyboard and communication equipment.
- Hearing activity requires the ability to participate in numerous conversations throughout the day, both in person and over the telephone.
- Must have the ability to maintain concentration and focus on tasks requiring timeliness and attention to detail.

Working Conditions:

- Must be able to complete job duties in an environment with some background noise and frequent interruptions.
- Must be able to work in an office environment and be outside for field validation.
- This position must be prepared to provide assistance during after-hours as needed.

Travel: Occasional travel (company vehicle or commercial vehicle) may be required.

The above statements are intended to describe the general nature and level of work being performed by the person assigned to this position. Essential job functions are intended to describe those functions that are primary to the performance of this job, and other job duties include those that are considered secondary to the overall purpose of this job.

This job description does not state or imply that the above are the only duties and responsibilities assigned to this position. Employees holding this position will be required to perform any other job-related duties as requested by management. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

Parts of this job description may include content generated by AI.

Originated: 10/9/25

Pierce Pepin Cooperative Services reserves the right to revise or change the job responsibilities as the need arises. This job description does not constitute a written or implied contract of employment.