

JOB TITLE: ENGINEER LOCATION: FORSYTH, MT

DEPARTMENT: ENGINEERING FLSA STATUS: NON-EXEMPT

OPEN DATE: 10/30/2020

**CLOSE DATE:** 

The statements herein are intended to describe the general nature and level of work being performed by employees and are not to be construed as an exhaustive list of responsibilities, duties and skills required of personnel so classified. Furthermore, they do not establish a contract for employment and are subject to change at the discretion of the employer.

## **POSITION SUMMARY:**

Plan, design, engineer, field stake, and inspect all Outside Plant telecommunication construction projects to meet or exceed cooperative and RUS design standards and specifications. Responsible for preparing and maintaining accurate detailed maps, staking sheets, subscriber cutover records, schematics, and other diagrams needed to meet or exceed company design standards and specifications. This will be accomplished by using GIS based software such as Mapcom systems, AutoCAD, and/or other plant record systems. Obtain right-of-way and construction/environmental permits from local, state, and federal agencies as well as private individuals. Plan and prepare drawings for new construction, removal or rearrangement of existing aerial and underground telecommunications lines, cables, and conduits. Select routing of lines and determine electronic and network equipment requirements as appropriate, including broadband loop extenders (currently- Actelis and Positron), and wireless access systems (licensed and unlicensed radio equipment, e.g. Ubiquity and others). Prepare plan sheets and detailed drawings for the construction and installation of telecommunications lines, cables, conduits, electronic equipment, customer premise equipment (CPE), and wide area network (WAN) elements. Develop estimates for construction, telecommunication electronics, network equipment, wireless equipment, labor and material costs. Provide technicians and contractors with specifications on the type and installation of network equipment. Provide technicians and contractors with copper and fiber optic cable splicing schematics and instructions. Conducts inspections of contractors to ensure that projects are being constructed according to the plans and specifications and conforms to the project's contractual or budgetary requirements. Assist in the maintenance of plant and cable records data using facilities records management software, engineering tools and Mapcom (or similar) systems. Complete close out of project work orders ensuring accurate as-built information is provided on maps, material accounting, property tax record updates, and recording of easements and right-of-way. Maintain knowledge of copper, fiber optic, access design, wide area networks, and project implementation.

### ESSENTIAL DUTIES & RESPONSIBILITIES

- Plan, design, engineer, and prepare drawings and staking sheets for new and future construction, removal or rearrangement of existing aerial or underground lines, cable, and conduits to meet or exceed current cooperative and RUS standards and specifications.
- Accurately create, revise, and update drawings, staking sheets, maps, schematics and other related specification sheets for planning, construction and installation of telecommunication cable and equipment within a scheduled time frame.
- Coordinate construction projects and work orders with field personnel and/or Contractors.
- Assist in overseeing construction projects from planning to completion including field staking bore, vault, and other important construction locations.
- Select routing of lines and determine electronic and network equipment requirements as appropriate, including broadband loop extenders (currently- Actelis and Positron), and wireless access systems (licensed and unlicensed radio equipment, e.g. Ubiquity and others)
- Prepare detailed construction and installation drawings using CAD and manual drafting techniques



- Maintain knowledge and operation of global positioning system information.
- Prepare copper and fiber optic splicing schematics
- Research, investigate, collaborate, and make recommendations for the installation of electronic equipment important for the efficient utilization of the cooperatives network.
- Collaborate with plant records personnel on the development of cut over information.
- Utilize Mapcom systems or similar software and maintain current knowledge of the software's principles and applications.
- Prepare cost analysis on projects, to include calculation of costs of Aid to Construction for telecommunications projects; small and large.
- Research ownership and secure right-of-way from local, state, federal and agencies as well as private individuals for present and future projects.
- Maintain personal, phone and written contact with local, state, federal and agencies as well as the general public and fellow workers to provide timely information on project status.
- Inventory all construction materials, working closely with accounting; review invoices and verify units
  placed against proposed work order; assign work order numbers and input necessary information into
  work order system to include revising and updating plant records.
- Work with construction and outside plant on repairs and installing of telecommunications facilities when required.
- Research, order, load, and unload outside plant materials.
- Complete the following reports: RUS Yearly Reports; GVNW Plant Study; Montana and Wyoming Ad Valorem Tax Report and other reports and studies as assigned
- Submits accurate timesheets, mileage reports, gas tickets, materials, expense sheets, and construction drawings in a timely manner.
- Attend and participate in company safety & training meetings; use protective equipment and observe safety practices and procedures.
- Attend business meetings on behalf of the cooperative.
- Attend and participate in company safety and training meetings.
- Must work effectively as a team player.
- Must be detail oriented in all aspects of the job including Engineering, Communication, Documentation, Teamwork, etc.
- Perform other related duties as may be assigned by management.\*

### **FDUCATION & EXPERIENCE:**

Associates degree in electronics and/or engineering or equivalent experience PLUS three to five years of telephone engineering or telephone plant experience preferred. A combination of education and/or experience may be substituted in lieu of a degree.

#### LICENSES:

To perform this job successfully this individual should hold a valid driver's license and become and maintain a commissioned notary public for the State of Montana.

# GENERAL INFORMATION:

The general work hours for this position are 8:00 am - 5:00 pm Monday through Friday. Overtime will be required on occasion. This is a Non-Exempt position, subject to the overtime provisions of FLSA.

<sup>\*</sup>These tasks do not meet the Americans With Disabilities Act definition of essential job functions and are usually less than 5% of time spent. However, these tasks still constitute important performance aspects of the job.



Send resume with cover letter to:

**Human Resources** 

email: jobs@range.net