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During the past 50 hours of work, I worked on a project near Richmond, Virginia. It involved installing a Fiber to the Home (FTTH) network, which uses fiber optics to provide high speed internet access from a central location to end users. I was in charge of connecting the residential network to the broader upstream network. This project allowed me to gain more knowledge in one of my learning objectives for this semester, which is to learn to build network pathways point by point through live network cases.

Part of my job was to analyze network design maps to make sure that the design was intact and in place. I corresponded with the Network Engineers at Cox Communications to resolve any discrepancies I found. After ensuring the design maps were good to go with Cox, I built the splice points which are the network distribution that connects different spans of fiber optic cables.

One of the challenges I faced during this project involved a central backbone 144F cable. This is a fiber optic cable which contains 144 individual fibers, with each fiber able to be its own network pathway. The design map called for a 144F cable, however I discovered a 96F cable in its place. I contacted one of the supervisors of construction at Full Circle, the company that installs the fiber optic cables that we work on and informed him of the error by going over the design map and explaining what cables were missed. This delayed the project for three days while the cables were switched out.

During the delay I worked on the portions of the network that did not involve that section of cable. I also built various cross-connects, which are the final terminal that end users connect into via fiber optic drops to receive telecommunications. Due to proper planning and project

management, our deadline was not missed because I was able to quickly isolate the problem and work around it.