

NORTHWEST COMMUNICATIONS

Infrastructure Expansion & Upgrade

As part of a critical effort to deliver high-speed internet services and upgrade telecommunications infrastructure in remote areas of Wisconsin, Northwest Communications selected Oldcastle Infrastructure's Duralite™ 2436 handhole. The superior construction, lighter weight, and ease of installation provided Northwest Communications with an innovative, durable, and cost-effective solution.



CHALLENGE

Northwest Communications provides phone services, high-speed internet, and high-definition cable TV throughout its eight-community service area in Western Wisconsin. The second largest independent telecommunications firm in the state, Northwest Communications owns, manages, and maintains its own private cable and fiber infrastructure, including manholes, handholes, underground conduit, telephone poles, and antenna towers. Strategic positioning of this infrastructure ensures that the necessary facilities are ready and available to service customer needs.

The company is extending high-speed internet service to more remote areas of its coverage area. Northwest Communications is burying fiber optic cable to deliver these services to outlying areas and ultimately replace phone lines.

Selecting the right underground enclosure, cable vaults, and other infrastructure is crucial to sustain long service life, minimize maintenance, and reduce liability issues.

SOLUTION

Northwest Communications recently installed 80 Oldcastle Infrastructure Duralite 2436 composite handholes equipped with Tier 15 plastic lids for enclosure integrity as part of an expansion program around St. Croix Falls, Wisconsin. Able to withstand heavy loads, the lightweight 24" x 36" enclosure has been engineered and tested for maximum body, lip, and sidewall strength and durability.

Northwest Communications' utility services contractor, Tjader & Highstrom, installed one box approximately every 1,500 feet. The resulting network of handholes now provides durable, accessible security to Northwest Communications' growing service infrastructure.

Superior material selection was a big factor in selecting the Duralite units, according to Greg Cardinal, Northwest Communications' Plant Manager. Cardinal oversees contractors for installs and day-to-day service, and is the purchasing decision-maker for underground enclosures. Duralite's strategically engineered enclosure design and innovative material composite blend made it the right choice to deliver the reliable, high-quality performance that Northwest Communications and its clients depend on.

BENEFITS

The Duralite 2436 provides the strength of polymer concrete at half the weight, which translates into safer, easier, and significantly less costly installation.

THE LIGHTWEIGHT ADVANTAGE

Duralite's significantly lower weight translates into convenience and flexibility, because there is no need to coordinate transport by a flatbed truck. "We can use our pickup truck to deliver boxes to the site and work on our own schedule," Cardinal said. "Also, the box's lid is awesome. I can move it by myself, and it seems really sturdy."

Only two crew members and a backhoe were necessary on site for the install of the Duralite enclosures. The backhoe was used only to dig the hole, drop pea gravel, backfill, and compact the soil; it wasn't necessary for actually setting the box in place. Also, the crew did not require bracing when backfilling.

In addition, the box holds a substantial amount of additional fiber line. The contractor was able to store 60 feet of extra fiber in each box for each of three lines – 180 feet in all.

EASIER INSTALL EQUALS SIGNIFICANT COST SAVINGS

Beyond their reliable, high-quality performance, the Duralite 2436 boxes also delivered significant cost savings for Northwest Communications. Due to their lighter weight and the resulting streamlined set-up process, the company saved approximately 30 percent installing the Duralite 2436 boxes compared to standard polymer enclosures.

