



Radio Frequency Identification Devices (RFID)

Each year, millions of new assets are installed within the United States, many of which are underground utilities. Among these assets, tracking utility installations has been a particular challenge as many of the utility assets are located underground, were installed by others, and may have been in place for many years. In regard to the utilities located within the right of way (ROW), some are publicly or privately owned and can be found above ground as well as underground.

Whatever the ownership situation, it has become increasingly important to know the location, status, and maintenance history of these assets so that they can be protected and managed more efficiently. Utility companies and others use many different methods to identify the location of underground utilities. One method that has become more common in recent years is the use of radio frequency identification (RFID) technology.

RFID technology provides the capability to store a unique identification (ID) number and some basic attribute information, which can be retrieved wirelessly when the markers detect a radio signal from a remote reader. This technology has the potential to offer utility operators and owners a unique opportunity to help optimize the management of utility installations within the ROW. It could also offer them the opportunity to better manage other ROW functions (e.g., outdoor advertising, parcel information, etc.), as well as asset inventory and management needs in connection with their own infrastructure (e.g., communication ducts, cable, boxes, manholes, signs, survey/ROW monuments, etc.).