The residential water meter system in North Las Vegas, Nevada, was approaching the end of its useful life. As a result of this outdated system, the City of Nevada was spending money on labor and battery replacement every year. Updating and replacing the 88,000 residential meter units was necessary to reduce maintenance costs, improve the accuracy of revenue collections and identify waste and leaks in the system.

Oldcastle was part of a team selected for the contract to complete the update. The project required not only changing out the meters inside the existing boxes with more current technology, but also replacing the meter box cover with one that could accommodate a new antenna configuration to permit remote readings.

Complicating the project was the fact that the municipality uses a wide range of meter boxes, of different sizes and materials (concrete, polymer, plastic) from a number of manufacturers. To meet project deadlines, it was necessary to design a new cover, source the tooling and tool build and produce the initial product in a greatly compressed time frame.

The City selected Oldcastle’s Fibrelyte line of covers to be installed system-wide, citing a number of important factors:

- High strength/weight ratio
- Ability to accommodate the proposed new antenna configuration
- High coefficient of friction, to prevent slippage in pedestrian footpath areas
- Availability in a variety of sizes to fit the assorted meter boxes used in the system

Oldcastle's rapid prototyping capabilities helped ensure the custom-designed FL03 samples were delivered to the customer quickly, while the unique Product Stage Gate process allowed for quick completion of the mold. Through the collaboration and disciplined workflow of the Oldcastle teams, production design and tool build was completed in under five months.

Within a week of the first purchase order, Oldcastle delivered every product needed for the first phase, totalling thousands of lids.

For the installation phase, the project team is deploying three crews of three members each, to install 250–300 meter update kits per day, including the new covers. Installation should be complete by October 2020.
Completing a product design/tool built/process buyoff in approximately 19 weeks is a monumental accomplishment.

Ian Marten | Senior Product Manager