

CLIENT

Utility located in northeastern Florida

PROBLEM

Seven of the most severely deteriorated manholes in a single community were identified and scheduled to be conventionally excavated and replaced leading to significant disruption to the area.

SOLUTION

To limit neighborhood disruption, it was determined that these manholes could be repaired and structurally lined with SprayWall as opposed to full excavation.

For over 25 years, Sprayroq's SprayWall lining was left out of the standard practice mindset for a Utility located in northeastern Florida after having been removed from their standard list of approved products. Over that period, beginning in the late 1990s, manholes began deteriorating, and those deteriorations started to add up.

Early in 2020, a project was identified through the Utility's engineering department for seven severely deteriorated manholes in the area. The initial capital-improvements-funded project called for these seven manholes to be conventionally excavated and replaced with new structures. Unfortunately, this work would disrupt the local community for at least six months with heavy construction, bypass pumping, and extensive M.O.T. that would reroute residents for miles around the construction site.

As word spread of the dependability of Sprayroq's structural lining system to the engineering department, the question was asked, "could these manholes be repaired and structurally lined instead of being fully replaced?"

DIVING DEEP TO FIND THE PERFECT SOLUTION

Engineered Spray Solutions, LLC (ESS), a Sprayroq Certified SprayWall Application Partner with over 25 years of spray-applied infrastructure rehabilitation and repair experience, was asked to review the project to determine if repairs and structural lining were a suitable option as opposed to the conventional dig-and-replace method.

ESS concluded that the project was suitable for structural lining with SprayWall at various structural thicknesses. It was determined by Sprayroq Engineers that 500 mils on the majority of the walls and up to 1,000 mils on the most deteriorated walls would be sufficient to achieve the proper design protocols.

ESS presented the project to the Utility engineers in a turnkey proposal that included a detailed bypass pumping plan and an extensive M.O.T. plan to limit the neighborhood disruption to a single-lane closure. They were ecstatic and accepted the proposal noting the tremendous cost savings and minimal disruption to the community. This project was completed in July 2021 on schedule, on budget, and without a single neighborhood complaint.

CONCLUSION

As of August 2021, this Utility is completely re-evaluating their capital improvement projects budgeting to consider Sprayroq structural repair and lining vs. traditional excavated manhole replacement for all future projects. Ultimately, ESS and Sprayroq have achieved product approval for this area and changed traditional thinking of excavation vs. structural rehabilitation within this Utility's departments.

