

The Kelly Station, a 40+ year old brick construction lift station operated by the City of Seneca, South Carolina had significant evidence of infiltration, root intrusion and a high level of debris build-up on its walls. It was determined that a replacement should be scheduled within a years time. Located less than 30 feet from popular Lake Keowee, the bottom of the structure is situated below lake level. Robert Faires, Director of Utilities for the City, called Sprayroq to perform an assessment and offer recommendations for how to best deal with the structure. Upon initial visual inspection of the station, our crew confirmed the water and root infiltration as well as loose and missing bricks and deteriorating mortar joints. Because of the current levels of infiltration and root intrusion the station's pumps were operating almost 60 minutes per day. Sprayroq applicators went to work devising a plan.

## SOLUTION

On June 3, 2008, applicators mobilized to the Kelly Lift Station. Our crew cleaned the structure using a 4000 PSI pressure washer. This was followed by pumping Hydro-Cut Urethane Grout by de Neef Construction Chemicals to stop the water infiltration from seeping through the existing brick structure. After the initial infiltration was eliminated, applicators began coating the walls with Five Star structural repair mortar. After the walls were parged, Spraywall® was applied at a thickness of 250 mils to the inside of the structure.

## RESULTS

The lift station was put back into service on June 6, 2008 (Less than 1 hour after the installation of Spraywall) and by June 8, 2008 the City of Seneca reported a decrease in pump usage at the Kelly lift station of 50%.