

Naples, Florida 54" Cured-in-Place

FDOT Project No. 405250-1-52-01

Collier County, (Naples) Florida

January 9, 2003 through January 16, 2003



This was a storm drain rehabilitation project on State Road 45 (US-41). Better Roads, Inc. was contracted to do the work. Southeast Pipe Survey, Inc. was subcontracted to line 2869 linear feet of 54" diameter storm drain.

Because DOT prohibited excavation on US-41, Southeast Pipe had no alternative but to install the entire 2869 feet in one shot, instead of installing several smaller segments. Due to the record setting length and weight of the liner (440,000 pounds), an impressive onsite wetout facility was constructed which included a powered

nip conveyer, resin static mixer, 80 lf of roller beds and a specially designed inversion tower totaling 26 feet in height. Tents were constructed over the entire facility to protect the liner from the sun's rays. The entire area was lighted to allow Wetout and inversion to continue 24 hours until complete. Special holdback ropes were made with special loops in the end to prevent damage to the liner during installation. Crews plugged and bypassed branch connections to the 54" storm drain to keep water off the liner during curing and to minimize odors from the resin. Representatives from Daystar Composites LLC, the liner manufacturer, and Reichhold resins were on site to provide support throughout the project.



Southeast Pipe crews installed 2869 linear feet of 54" inversion liner starting at 10th Street North and 6th Avenue North extending to US-41 through 2 ea. 45 degree bends, turning North in the southbound lane of US-41 through several manholes, ending at 12th Avenue.

Start to finish, it took seven full days to successfully install the enormous liner. Southeast Pipe was able to meet all contract specifications without any traffic disruptions on US-41. W.T. Sapp, CIPP Superintendent, with 18 years experience at the time this job was completed, managed the installation while overcoming tremendous challenges.



54" Liner ready for shipment at Daystar Composites



Liner positioned on jobsite at the beginning of the Wetout facility



Static resin mixer connected to one of the 8 tankers of resin required to complete the Wetout of the liner



Inversion tower 26 foot height.