

## CASE STUDY

# Tuscaloosa Regional Airport

## Tuscaloosa, AL

### OWNER

Tuscaloosa Regional Airport, Tuscaloosa, AL

### ENGINEER

Atkins, Nashville, TN

### CONTRACTOR

REV Construction Inc., Tuscaloosa, AL

### INSTALLATION DATE

July-September 2017

### PRODUCTS

3,700' (1,128 m) of 24"-48" (600-1200 mm) HP Storm pipe

### DESCRIPTION

Sinkholes were developing along the Tuscaloosa Regional Airport's main runway and the decision was made to use HP Storm, a polypropylene pipe with high-integrity joints, to replace Class III reinforced concrete pipe. The pipe system was installed between the airport's primary runway, Runway 4-22, and the principle parallel taxiway.

By utilizing polypropylene pipe, the contractor was using 20' (6 m) pipe sections to replace the 4' (1.2 m) sections of RCP. The 20' (6 m) sections have far fewer joints within the system meaning far less chance for a potential joint failure. In addition, 20' (6 m) sections install more quickly and the installation was completed in 116 days, well in advance of the contract specified 140-day time limit.

Double gaskets were also used on the pipe's joints to reduce the opportunities for sediment to infiltrate the system. This provided an additional measure of sealing beyond typical soil tightness to meet the 10.8 psi criteria for watertightness.

