

## RINKER MATERIALS<sup>TM</sup> AND PSI KEEP TAXIWAY CLEAR FOR MYR FLIGHTS High-Flow, Multi-Culvert Stormwater Management System Installed During Hurricane



Serving more than two million passengers annually, Myrtle Beach International Airport (MYR) recently restored Taxiway A – Phase I as the first step in a multi-phased, multi-year project to improve the traveler experience. The 30-year-old asphalt taxiway was upgraded with a concrete surface protected by a new stormwater management system capable of accommodating severe weather common in the area. PSI of Conway, LLC. overcame a hurricane, fiber optics and substandard soil to install a stormwater management system using structural concrete components from Rinker Materials<sup>TM</sup>.

As the primary route for airplanes transporting arriving and departing passengers between the MYR terminal and its lone runway, rehabilitating Taxiway A according to Federal Aviation Administration (FFA) specifications with an eye on safety and future traffic volume was critical. Delta Airport Consultants, Inc. was enlisted by MYR owner, Horry County Department of Airports, to lead the project design, which included a custom stormwater management system installed over an existing fiber optic infrastructure buried less than 10 feet underground. In addition to navigating the fiber optics, PSI of Conway, LLC. also replaced unsuitable soil with compacted #57 stone to stabilize the stormwater management system constructed with 6,500 feet of FFA-approved Class 5 C443 reinforced concrete pipe (RCP).

"As a coastal city susceptible to storms, we get around 50 inches of rain each year. That's more than 10 inches above the national average, so the new airport drainage system will be tested by heavy rains regularly" said Keith Mesimer, owner PSI of Conway, LLC. "Rather than installing a traditional single culvert of large diameter RCP, we installed multiple culverts of smaller RCP side-by-side to avoid the fiber optics while still meeting stormwater specifications. Taking this unique approach required a variety of RCP sizes, so it was invaluable to have Rinker Materials specially-produce gasketed Class



5 RCP locally to keep the project on schedule even with the disruption of Hurricane Dorian."

With no culvert deeper than five feet, the Taxiway A stormwater management system features triple culverts of 36" RCP, triple culverts of 30" RCP, quintuple culverts of 24" RCP and more than 36,400 linear feet of underdrain installed across 12 work areas. Primarily funded by an FFA grant, the \$30 million Taxiway A – Phase I was successfully completed despite 70 mile per hour winds and more than 10 inches of rain delivered by Hurricane Dorian.

"PSI was tasked to install the stormwater system per FAA requirements and on strict schedule," said Breck Dunne, Director of Airport Development for Horry County. "There knowledge and workmanship proved to be an asset to the construction team."

