

## Grand Strand Airport Rebuilds Apron with Concrete in North Myrtle Beach, South Carolina



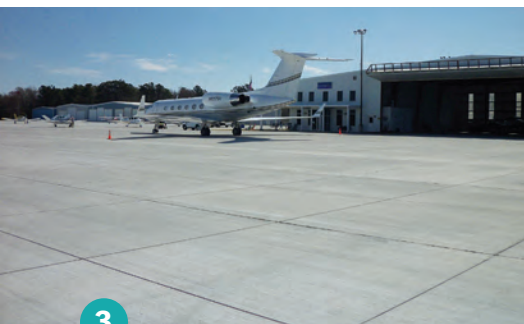
1

Schedule 1 ramp complete



2

Schedule 2 ramp complete



3

Apron reconstruction complete

The value of concrete, especially for aircraft parking aprons, is widely recognized by agencies and airport owners. The added durability, low maintenance, and coolness have all been attributes cited as reasons for preferring concrete over asphalt.

After factoring in existing pavement conditions and the need to upgrade in order to meet both business and recreational user requirements, the Grand Strand Airport, located in North Myrtle Beach, South Carolina, working together with the FAA, selected concrete as the pavement of choice to replace the aged and cracked asphalt apron.

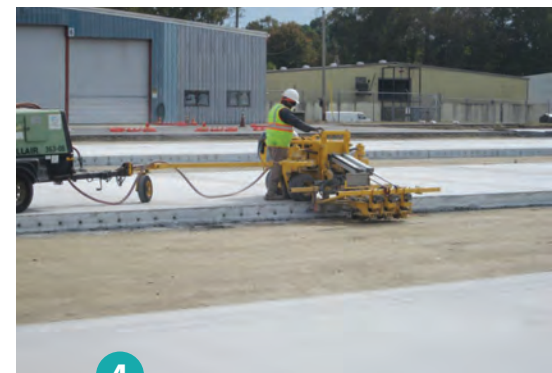
Available federal project funding and the need to keep the airport open for operations meant the apron rehabilitation needed be completed in two schedules. A 10-inch (P-501) concrete section was utilized for both of the schedules. The first schedule was bid June 2013 and contained 25,950 square yards of pavement reconstruction; the second schedule, bid June 2014, replaced another 28,525 square yards of pavement.

Engineering consultant Talbert & Bright reviewed a possibility of a concrete overlay for this project, however, due to adjacent pavement grades, building elevations, future aircraft weights, and apron edge lighting, it was determined that a large portion of the ramp would require reconstruction to maintain drainage and transition to existing pavement. The final analysis of the overlay versus reconstruction strategy indicated that potential cost savings were not substantial enough when all factors were considered.

The ability to re-use the aggregate base within Schedule 1 also resulted in project cost-savings versus having to purchase and truck in new aggregate base coarse.

Contractors for both projects were able to start and complete paving during the late fall and winter months when the tourist traffic was at its lowest. This not only helped to minimize inconvenience at the airport, but also assured timely concrete material deliveries to the contractors' slip-form paving equipment.

ACPA-SE member, Bobby Tillery of J. A. Long, stated the paving during Schedule 2 moved along well. The concrete supplier, Argos Ready Mix, provided the 650 flex strength concrete from their central mixed concrete plant. As a supporter of the industry, Tillery hopes to see other airports within the region benefit from long-life concrete.



4

Drilling for dowels installation