

Rehab Runway 14/32 with PFC

Sheridan, Wyoming

Client
Sheridan County Airport

Size
8,300 ft. primary runway

Completion Date
July 2011



Construction of the new primary Runway 14/32 occurred under multiple AIP projects from 1990 to 1995. The last phase of work occurred just prior to opening the runway to traffic in 1995 and involved placement of a Porous Friction Course (PFC) over the entire runway to provide a skid resistant surface. In 2011 this PFC surfacing reached 16 years of age, which is considered to be the life expectancy for this type of surfacing. The runway had been seal coated several times to keep the aggregate locked into the PFC matrix. Further seal coating would have plugged up the voids in the PFC and reduced its skid resistant characteristics, thus creating a hazard to aircraft operations.

This project included removal and replacement of the PFC on the entire 8,300 ft. primary runway. Specific features of the project included: rotomilling off the existing PFC surfacing, plus 1 1/2 - 2 inches of the underlying dense graded asphalt pavement; placement of a dense graded asphalt leveling course, followed by a new 1" nominal thickness PFC layer; minor shoulder grading to match the new pavement surface; and completion of new pavement markings for the entire runway.

Work was conducted under a tight construction time line of 42 working days in order to minimize impact on the airport. In addition, the cross-wind Runway 5/23 was required to remain open to aircraft traffic at all times. The only exception was during rotomilling and paving operations through the runway-runway intersection area. This work had to be completed during a full airport closure between the hours of 9:00 pm and 6:00 am with the cross-wind runway reopened to traffic for the morning commercial flight.