

South Dakota School of Mines & Technology
501 E. Saint Joseph St.
Rapid City, SD 57701-3995

Rapid City Regional Airport
4550 Terminal Road
Rapid City, SD 57703

FOR IMMEDIATE RELEASE with attached photo

Cutline: Jennifer Benning, Ph.D., an associate professor of civil and environmental engineering at Mines, and Ph.D. student Jason Phillips pose in front of sedum plants on the roof of the main terminal at the Rapid City Regional Airport.

Green Tops: Airport Features New High-Tech Green Roof

RAPID CITY, SD (Oct. 11, 2018) – Visitors to the [Rapid City Regional Airport](#) can now take-in a new green roof project as part of their experience. The rooftop deck that extends over part of the main terminal includes a green roof project recently installed by [South Dakota School of Mines and Technology](#) graduate student Jason Phillips. Part of this rooftop area is planted in sedums, small flowering plants that require little maintenance and that do well in the regional climate. Phillips’ work shows off the advantages of using technology to monitor and maintain these green rooftops.

Phillips, who is working toward his Ph.D. in civil/environmental engineering, says “This is old technology, this has been going on for a long time around the world. I am just an advocate of bringing this sustainable technology here.” Green roofs have been around for centuries; they offer excellent insulation, keeping buildings cool in the summer and warm in the winter. Phillips’ project has a high-tech twist, the soil moisture beneath the sedum plants is being monitored by a set of sensors that allow automatic watering as needed.

These roofs also provide an excellent sound barrier which keeps buildings separated from outside noise. Green roofs are highly durable and stand up to weather events like large hail better than conventional roofing; and at a minimum, double the life expectancy of the waterproof roofing membrane. Green roofs can serve as an efficient and important way to regulate runoff from urban areas. Water that falls on these roofs is absorbed by the engineered soil and is used by the plants which reduces the amount of runoff flowing into neighboring waterways.

This practice can enhance quality of life in urban areas and increase habitat for local wildlife and birds. Sedum covered roofs also combine well with solar panels, as the plants do not heat up as much as a conventional roof. This helps keep the solar panels cooler in direct sunlight which can extend their operating life and improve their overall efficiency.

The Airport has a mutual interest with SD Mines in promoting scientific research to support issues that affect public health, safety and welfare. “Working with the school provides a great benefit to our facility as well as an opportunity for our passengers to enjoy our patio,” stated Patrick Dame, Airport Executive Director. “This project is an example of our commitment to our goals of protecting the environment and inspiring innovation that improves the customer experience. We are excited about our partnership in this project and are looking forward to seeing its results.”

This project was funded in part through a grant from the West Dakota Water Development District (WDWDD). Their mission is to support entities that furnish financial, educational or

other aid necessary to any project within the District that encourages: better utilization of our water resources through water conservation; proper water management; and evaluation and protection of our water quality, putting water to beneficial use for domestic, municipal, industrial and irrigation as well as recreational purposes.

The media is invited to a press availability to view the newly installed roof at the Rapid City Regional Airport at 10 a.m. on Oct. 17. Reporters are asked to gather on the second floor of the Main Terminal.

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About SD Mines

Founded in 1885, the South Dakota School of Mines & Technology is a science and engineering research university located in Rapid City, S.D., offering bachelor's, master's and doctoral degrees. The university enrolls 2,778 students with a student-to-faculty ratio of 15:1. The SD School of Mines placement rate for graduates is 97 percent, with an average starting salary of more than \$61,300. Find us online at www.sdsmt.edu and on [Facebook](#), [Twitter](#), [LinkedIn](#), [Instagram](#) and [Snapchat](#).

About Rapid City Regional Airport

The Rapid City Regional Airport recently added service to New York/Newark, Saturdays only, through the summer, bringing its total destinations to 11. The airport also has flights to Chicago, Dallas, Denver, Las Vegas, Minneapolis, Phoenix-Mesa, Salt Lake City, and seasonal service to Atlanta, Charlotte, and Houston. Find more information online at www.rapairport.com.

