

Facilities Improvements



WINNER: OLD GUARDRAILS FIND NEW PURPOSE

What is more fitting than to use recycled materials in the construction of a building that houses recyclables? The Clearwater County, ID, Road and Bridge Department did just that, and saved the county thousands of dollars.

“Years ago when we started the recycle program, we didn’t know how it was going to go, but we found that a very large portion of our population wanted to recycle,” said Clearwater County Commissioner Rick Winkel. The recycle program began in a building that quickly became too small. “We needed a barn big enough to put the compactors in and store equipment.”

Road and Bridge Department personnel wanted to build a durable, “forklift-proof” building to store large bales of recyclables, but money was an issue. “We are a very rural, poor county, we didn’t have the money needed to ‘side’ a new building.” The county could afford to build the basic structure and get a roof on it, but that was all. The team evaluated various options to help with the challenges of constructing a new building. Thinking outside the box, the county decided to use aluminum guardrails on the new building. “Our maintenance yard had large amounts of old aluminum guardrail because of a new State requirement to use steel instead of aluminum guardrails on Idaho’s roadways,” said Winkel.

But with this innovative option came a new challenge of using metal and wood construction materials. “We have two different materials expanding and contracting at different rates in wavering climates. Metal tends to expand and contract and wood tends to pick up moisture and become dry. This is an issue because the climate in Clearwater County can range from zero degrees to 120-degrees in a year,” said Winkel. The county hired a local contractor to construct the new building resolving the materials issue while installing maintenance-free aluminum siding on the outside of the structure. “The guardrail is made to handle problems that arise from working machines in close quarters,” said Department Administrator Cassie Bansemer.

To save financial resources, the county used department-furnished equipment and manpower to demolish the old building. The county also used its resources to perform site preparation, and install new power, sewer, and water hook-ups for the new building. The new building cost about \$60,000 and includes a break room, concrete floor, wiring, and lighting. Winkel estimates the guardrails saved the county \$30,000.



Source: Clearwater County, ID, Road and Bridge Dept.

The new building was not only cost effective to build but also makes the recycle program itself more efficient in several ways. People used to have to go inside to drop off recyclables, but now they can just drive through and continue with their day. Personnel were once required to haul recyclables to the compactors but now everything is located under one roof. The recycle program reduces the amount of waste going into the local landfill. This process has reduced tipping costs, which can be as much as \$40,000 a month. "That's not counting the rest of the operations, so any way we can save money or reduce what we haul and put into our landfills, we're all for it," said Winkel.

Bansemer said the building serves its purpose and fulfills a recycling need at the same time. "Make your building with a double wall, meaning you put guardrail all the way up on the inside and outside of the walls." Winkel has additional advice. "I would use a bolt washer and nut and drill all the way through the poles instead of the system we used, which was a 6-inch lag bolt."

County leaders say they have their constituents' best interests at heart, not only what's good for the county immediately, but the long-term effects as well.

"We were very pleased when we got the building completed," said Winkel. "It looks good. It performs well. It turned out very nice and the constituents like it. They were very pleased that we were able to take something and recycle it. The people that visit the building care a lot about recycling, taking care of the environment, and not filling up the landfills any more than we have to."

• **For more information contact:**

• **State:** Idaho

• **Local Agency:** Clearwater County-Road and Bridge Department

• **Name:** Rick Winkel

• **Position:** County Commissioner

• **Telephone:** 208-476-3615

• **Email:** rwinkel@clearwatercounty.org