New Childcare Building Offers Chance to Learn in a "Green" Environment

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The Ranch Early Education and Childcare Center creates connection with surrounding wetlands and ranchlands as well as building's natural features



Jackson, Wyoming – March 18, 2011 – Jackson firm Ward + Blake Architects worked in collaboration with Boston-based D.W. Arthur Associates Architecture, Inc., to create a building for The Ranch Early Education and Childcare Center that would not only be an inspired learning space for children but also would serve as a teaching tool in its own right, according to Ward + Blake Principal Mitch Blake.

The new 12,500-square-foot center incorporates many thoughtfully planned elements in the building to engage children. Platforms and caves are built-in along hallways curved in a pattern reminiscent of the Snake River; a beaverslide, similar in appearance to those found on nearby ranches, provides visual interest on the playground; and in the future, a sod-roof playground will provide additional play space with an amazing view.

The building is in the process of receiving LEED Gold certification for its many environmentally friendly components, including a ground source heat pump, natural daylighting, motorized windows for cross ventilation, and a thermal mass seismically stable rammed earth wall—the first use of rammed earth in a Wyoming educational center—as well as smart heat and light sensors with a system that automatically adapts thermal comfort to the building's needs.

"We worked to create spaces that made it interesting for kids—places to explore and experience with unique textures and spatial arrangements," says Mitch Blake. "Our choices were based not on whimsy but on ideas to stimulate childhood development while providing a wonderful learning environment for children."

The design-envelope was carefully fit into the surrounding wetlands—providing an outdoor opportunity for children to explore their surroundings. Mr. Blake states that "by mitigating the impact of the building on the wetlands and integrating the natural environment into the design while paying homage to surrounding ranchlands and culture, we hope to encourage the children to explore and make connections between themselves and their environment in a positive, sustainable way."

Ward + Blake's use of a 'New West' architectural vocabulary epitomizes the growing Western Modernism movement. The Jackson Hole residential and commercial architects capture the authentic, independent spirit of the West while taking regional design in a fresh and modern direction. The Jackson, Wyo., residential and commercial architecture firm is known for its award-winning eco-friendly innovations and received the Wyoming AIA Award of Excellence. For additional information, visit www.wardblakearchitects.com, or call Mitch Blake at 307-733-6867.

BUILDING PROJECT FACT SHEET: The Ranch Early Education and Childcare Center

Architects: Ward + Blake Architects (http://www.wardblakearchitects.com) in collaboration with D.W. Arthur Associates Architecture, Inc. Size: 12,500 Square Feet Site: 10 acres of wetland

Special Design Features:

Ranch inspired architecture: Ward + Blake took cues from the surrounding ranchland, accessing a local vernacular and materials. An homage to a beaverslide is situated in the outdoor area, creating visual interest as well as offering a tribute to the ranchlands that are hayed in the surrounding landscape. The shed roof design is reminiscent of lambing pens or sheds for hay storage. Throughout the building the undulating hallways are inspired by Snake River eddies.

Outdoor access: Classrooms open directly onto outdoor play areas allowing children to fully take advantage of the outdoors with views of surrounding ranchland. Natural daylighting: Skylights and clerestory lights bring natural light into the classrooms Natural ventilation: Motorized windows bring in fresh air and create cross ventilation Acoustically treated ceilings: Ceilings reduce reverberation and keep building quiet Radiant floor heating: Radiant heating in concrete floors with area rugs keep indoor spaces comfortable for children playing on floors

Sustainable Design Features:

Leed certification: Building is being considered for LEED Gold designation. LEED is an internationally recognized green building certification system, created by the US Green Building Council, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Ground source heat pump: Pump makes use of a hot spring on the property to heat and cool the building.

Reclaimed wood: Salvaged wood from an old railroad car in Ashton area used for siding, cabinets, trim and ceiling.

Seismically-stable EarthWall rammed earth construction: Wall in entry area was built using a patented process by Ward + Blake Architects' Tom Ward and does triple duty as an accent wall, an organizing wall for traffic flow through the lobby, and as a thermal mass that creates a constant temperature inside the building.

Building capacity: The center has availability for 66 students when fully staffed—at this time the center is staffed to accommodate 49 children. Currently there are 36 children.

Project Team:

Architects Ward + Blake Architects Jackson, WY (Mitch Blake – Principal in Charge, Ken Mahood – Project Manager, Chris Jaubert – Project Architect)

D.W. Arthur Associates Architecture, Inc. Boston, MA (Woody Arthur – Principal in Charge, Kelly Ryan – Project Manager)

Contractor Headwaters Construction Company Victor, ID

Structural Engineer Pillar Engineering Casper, WY Civil Engineer Jorgensen Engineering Jackson, WY

Mechanical, Electrical & Plumbing Engineers Beaudin Ganze Consulting Engineers Avon, CO

Landscape Architect Hershberger Design Jackson, WY

Landscape Architect BIOTA Research & Consulting, Inc Jackson, WY

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