

THE DAILY JOURNAL

Volume 112, Number 163

The McGraw-Hill Companies

Wednesday, June 2, 2010

2010 Gold Hard Hat Awards Now Open

Mountain States Construction magazine will devote its October issue to the Gold Hard Hat Awards, highlighting outstanding construction projects in Colorado, Kansas, Nebraska, North Dakota and South Dakota. We are now accepting project submissions for 22 categories from firms involved in any aspect of a project in the above region that has been or will be completed between Aug. 31, 2009 and Sept. 1, 2010. There is no charge for entries.

Go to www.mountainstates.construction.com to access the entry criteria and submission form. For more information, e-mail: melissa_leslie@mcgraw-hill.com or call 303-584-6724.

Names in the News



Vince Martinez has joined Ulteig as a CAD technician II at the firm's Englewood office. He graduated from Westwood College of Technology with a bachelor's degree in business and technical management and an associate's degree in commercial and residential design. He previously worked as an architectural designer.

Vince Martinez • Shaffer • Baucom Engineering & Consulting of Lakewood recently hired **Laura Carpenter** as an electrical engineer and promoted **Marcus Brand** to Revit manager and **Shane Copsy** to CAD manager.

Carpenter has more than 17 years of experience as an architectural engineer with an emphasis in illumination and electrical design. She is a graduate of the University of Kansas.

Brand has more than eight years of experience in the architectural design and drafting industry and has been involved in all aspects of design and coordination, including project management.

Copsy has more than six years of experience in the consulting engineering industry. As CAD manager, he will be responsible for providing leadership and vision to the firm in the area of CAD production.

News Briefs

Bridge Replacement Underway On 80th Avenue Over U.S. 36

The Colorado Dept. of Transportation has begun a bridge replacement project on 80th Avenue over U.S. 36 in Westminster, which has completely closed 80th Avenue until Thanksgiving.

The project will replace the existing structure, originally constructed in 1951 and one of Colorado's poor bridges, with one that is wider to make room for an additional left-turn lane from 80th Avenue to Oakwood Drive and a wider sidewalk. The new bridge will also have greater vertical clearance and will be longer to accommodate the future widening of U.S. 36.

"By replacing this structure, we are improving our aging infrastructure and making 80th Avenue safer for motorists and bicyclists," said CDOT Project Engineer Larry Quirk. "All of these improvements are being made while preparing for the future widening of this busy corridor."

Full closures of U.S. 36 are planned throughout the project for bridge demolition, girder installation and deck panel installation.

Structures Inc. is the contractor for the \$7-million project funded by CDOT and the city of Westminster.

NREL's RSF to Test New Sustainable Landscape Rating DOE infrastructure site one of the first landscapes to participate in green program

The infrastructure site surrounding the 222,000-sq-ft Research Support Facility, currently under construction at the National Renewable Energy Laboratory in Golden, was one of five Colorado sites selected to participate in the nation's first rating system for green landscape design, construction and maintenance.

The Dept. of Energy's RSF joins The Visitor and Research Center at Mesa Verde National Park; Moss Rock Place, a small home in Boulder rehabbed with a goal of net-zero energy use; Staley Neighborhood Park in Fort Collins; and the Mancos Public Library; as Colorado sites selected to participate in the pilot program. A total of 150 projects from 34 states as well as Canada, Iceland and Spain were selected.

The Sustainable Sites Initiative is an interdisciplinary partnership led by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at The University of Texas at Austin and the U.S. Botanic Garden to transform land development and management practices with the nation's first voluntary rating system for sustainable landscapes, with or without buildings.

The RSF was selected based on its many environmentally friendly elements. These sustainable practices include improving stormwater quality and reducing runoff through the application of porous pavement technologies; the creation of habitat and open space and the reduction of water demand through the use of native and adapted plant materials. Also important is the reduction of energy and resource consumption through the use of recycled and regional materials.

NREL's new building was designed by RNL of Denver and is being built by Haselden Construction of Centennial. The 32-acre site was developed to demonstrate DOE's commitment to sound environmental management that serves as an example to others and supports NREL's sustainability mission. Like the other pilot projects, the site will test the point system for achieving different levels of site sustainability based on a 250-point scale, and the performance benchmarks associated with specific credits within the Guidelines and Performance Benchmarks 2009.

The site's other sustainability features include an integrated campus shuttle network and extensive bike rack stations, widespread use of cooler reflective pavements, onsite energy creation and the innovative use of onsite materials for retaining walls.



Rendering courtesy of RNL

The 222,000-sq-ft Research Support Facility building in Golden, designed to be a model for sustainable, high-performance building design, will provide DOE-owned work space for administrative staff who currently occupy leased space in the nearby Denver West Office Park.

SITES will use feedback from this and the other selected projects during the pilot phase, which runs through June 2012, to revise the final rating system and reference guide by early 2013. The U.S. Green Building Council, a stakeholder in the Sustainable Sites Initiative, anticipates incorporating the guidelines and performance benchmarks into future iterations of its LEED rating system.

COMMENTARY

Design-Build Enhances Sustainability in Transportation Projects

By Art Hirsch

Design-build transportation projects have dramatically increased in popularity over the past several years throughout the United States. Significant cost savings have been realized on these fast-track projects because of shortened delivery schedules.

The cost savings have become an increasingly important issue to state departments of transportation experiencing increased construction material costs along with lower construction budgets. DOTs and municipalities demand that environmental, public and economic sustainable components be integrated into their transportation projects.

A sustainable highway project improves the natural, built and social environments while meeting transportation requirements and achieves short- and long-term economic viability. A misconception exists that adding sustainability to a design-build project will add

costs; quite the opposite, incorporating sustainable elements has shown to be cost effective while being environmentally advantageous.

Several opportunities and conditions exist within design-build to incorporate sustainability concepts:

1. Close coordination among environmental, design and construction engineers. This type of interaction sets up the innovation and proactive sustainable actions.
2. Design flexibility and creativity. Options abound for design flexibility between the usually acquired 30% design to the final design.
3. Reduce environmental impacts beyond NEPA requirements. Coordination, cooperation and creativity among the project management team to avoid and/or minimize environmental impacts apply cost-effective, sustainable actions.
4. Design coordination with affected neighborhoods. Communication and involvement with the local neighborhood and municipality can lead to improved project acceptance and promote a context-sensitive-solutions approach endorsed by FHWA and many DOTs.
5. Prime contractor constraints. On design-build projects, the prime contractor is concerned about managing costs and maintaining or exceeding schedule expect-

tations, and many times does not see the larger, cost-effective picture that sustainability can provide.

6. Frequent permit modifications. Because design-build projects are fast paced and dynamic, during the design phase, impacted areas requiring permits will increase, decrease or change locations. Early and frequent coordination meetings with the regulatory agencies must occur to streamline the permit-modification process. This will save the project costs that can result from schedule delays.

7. Subcontractors and contract language. If a design-build project decides to incorporate sustainable elements either by client request or by the prime contractor's own internal decision, sustainability coordination must occur early in the process. Specific sustainable actions must be identified and detailed early, as part of the subcontractors' contracting process, such as requiring metal recycling, waste separation, a fuel conservation-riding reduction plan, pollution prevention actions, and so on.

Art Hirsch owns TerraLogic Sustainable Solutions in Boulder, which specializes in transportation sustainability, design-build, environmental management, erosion control and water management.



Art Hirsch

RUSH - TIME VALUED NEWSPAPER



Mike Nelson
Meteorologist



For the 7-day forecast plus traffic alerts and road delays go to www.thedenverchannel.com.

	Today	Tomorrow	Friday	Saturday	Sunday
Denver Metro	78/54	76/54	78/56	77/55	77/55
Colorado Springs	79/54	80/50	81/55	79/53	79/53
Alamosa	83/46	80/47	84/49	83/46	83/46
Grand Junction	86/56	87/61	88/61	89/55	89/55
Fort Collins	77/51	76/51	78/53	76/53	76/53
Greeley	81/50	79/50	81/52	80/51	80/51
Pueblo	86/52	85/53	87/57	86/54	86/54

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