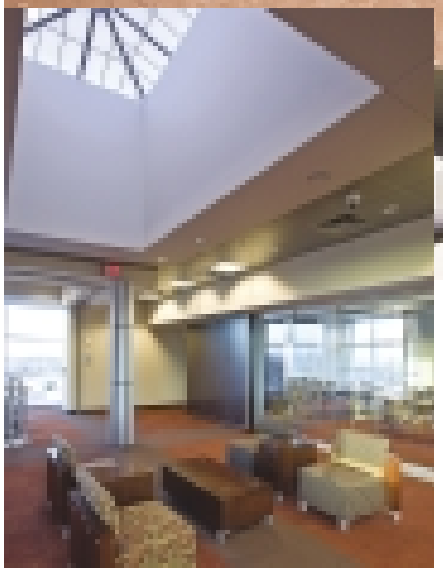
New Mexico Best of 2007

# Domenici Center for Health Sciences Education Phase 1

## Public Project Over $10 million



**The theme of this $12 million project** is collaboration and multidisciplinary medical education: between the general public and the students and faculty of the colleges of nursing, pharmacy and medicine.

Located at the University of New Mexico Health Sciences Center, the facility is comprised of two buildings: the first, incorporating classrooms and campus hub spaces such as a food court, bookstore, health club, student commons and copy center, is a 37,022-sq-ft three story plus basement with a pedestrian tunnel below. The second is a 9,529-sq-ft two-story structure housing a high-tech, 300-seat teaching auditorium with stage rigging systems for multiple uses. A trellis shade structure connects the two buildings over a breezeway.

Both foundations consist of pile caps and grade beams on augercast piers, and the tunnel and basement walls are cast-in-place concrete. The structures are brace steel-frame construction with composite metal deck and concrete floors.

The most highly-specialized space, the Clinical Performance Center, allows students to learn diagnosis and treatment through simulated patients, virtual reality teaching spaces and other environments that closely resemble real clinical facilities.

**Submitted by:** Flintco West and Dekker/Perich/Sabatini
**Owner:** Regents of UNM/ Health Sciences Center
**Architect:** Dekker/Perich/Sabatini
**General Contractor:** Flintco West
**Engineers:** Jeff Mortensen and Associates; Dekker/Perich Sabatini; Bridgers & Paxton
**Major Subcontractors:** Chaparral Electric; G&H Construction; Yearout Mechanical; PCI Contractors; Structural Services; L.G. Barcus & Sons; American National Insulation

New Mexico Best of 2007

# City of Albuquerque Open Space Visitor Center

## Public Project Under $10 million

PHOTOS COURTESY: KIRK GETTINGS/LEE GAMELSKY

**The 7,845 sq ft remodel** and additions project occupies a 48-acre site adjoining the Rio Grande Bosque and the Piedras Marcadas Pueblo ruins site.

The new $1.3 million Visitor Center incorporated an existing residential compound of four Pueblo-style wood-frame buildings along with new additions. Design was kept in context with this Pueblo style and features wood trusses and framing covered with a stucco system. Exposed steel columns and beams are utilized at exterior locations, such as at portal structures. The existing ceramic tile floor remains, with new stained and polished concrete floors in the additions.

The renovations and additions include indoor/outdoor connections to the Bosque and Pueblo ruins site, a reception/entry area, gift shop, offices, exhibit space and a multipurpose room. A CMU masonry and steel observation tower assists staff in ensuring the safety of visitors.

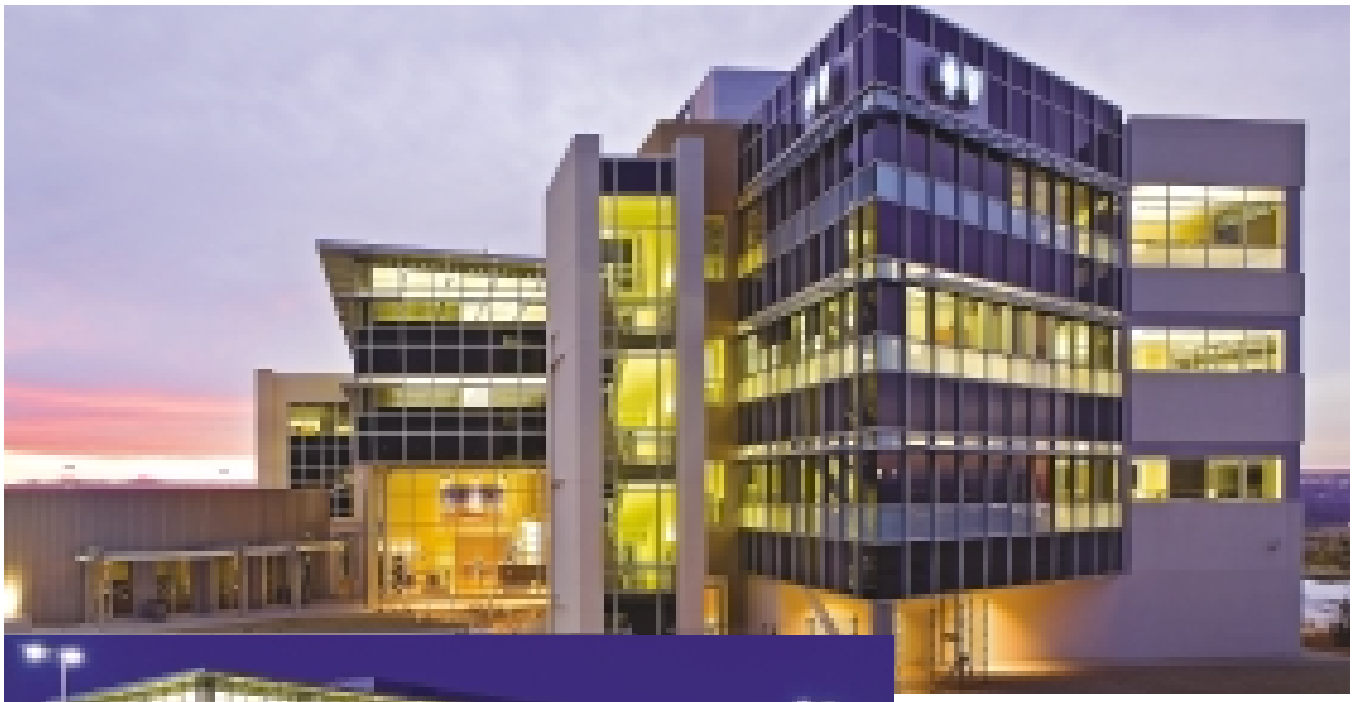
The Pueblo Plaza, an outdoor queuing space, includes a 3D abstract representation 'map' of the Rio Grande Valley, with blue ribbon tile as the river and landscaped areas depicting the major mountain ranges, stained concrete cones as the Valle Grande and Mount Taylor and inlaid ceramic tiles as the state's 19 Indian pueblos.

**Submitted by:** Lee Gamelsky Architects
**Owner:** City of Albuquerque
**Architect:** Lee Gamelsky Architects
**General Contractor:** Longhorn Construction
**Major Subcontractors:** Lynx Electric; Brycon Corp.; Metal Crafters; Allstate Steel; Rockscapes

New Mexico Best of 2007

# BlueCross BlueShield Office Headquarters

## Private Project Over $10 Million



**The 115, 000-sq-ft** BlueCross BlueShield headquarters in Albuquerque was designed to answer the long-term needs of the company. In addition to further enhancing the image of the healthcare provider, the $23 million building is designed with sustainable principles to save energy and to provide a healthy, uplifting work space for recruiting and retaining employees.

Some of the green design strategies include natural daylighting, the use of nontoxic, renewable materials and the provision of clean air.

On the ground floor is a 200-seat food-service area as well as meeting facilities for training and video conferencing. Major functional considerations in the facility included the design and installation of power and data distribution systems, ensuring flexible office layouts and maximizing security. To implement the latter, there is only one controlled entrance to the building at the main lobby.

The judges felt the project communicates a clear identity for the client and provides an important role model for future commercial office buildings in Albuquerque.

**Submitted by:** Dekker/Perich/Sabatini
**Owner:** Healthcare Service Corp.
**Architect:** ZPD+A and Dekker/Perich/Sabatini
**General Contractor:** Bradbury Stamm Construction
**Engineers:** Bohannan Huston; Dekker/Perich/Sabatini
**Subcontractors:** Cosentini Associates; RKM Design Consultants; B&D Electric; Miller Bonded; Sako Security; American National Insulation; Shine + Associates

New Mexico Best of 2007

# Mariposa East Commons Office & Sales Center

Private Project Under $10 Million

**The 16,308-sq-ft** mixed used project is the first phase of Rio Rancho's Mariposa community, at which 4,000 acres of single-family residences, shops, schools, public spaces and preserved space will be home to 18,000 people. Sitting on one acre, the $3.34 million center was completed April 2007.

The first floor of the potential LEED-certified building is primarily retail space, while the second floor is office space. The southeast end of the building is on a raised concrete plaza with planters; this plaza is a public space, providing entry to the glass-fronted retail areas and great views. A second-floor viewing deck offers more gathering opportunities.

On the western end of the building, a staircase leads to the second-story offices. A bridge leads from the staircase to the offices. A wall supporting the stair also serves for planned expansion to the north.

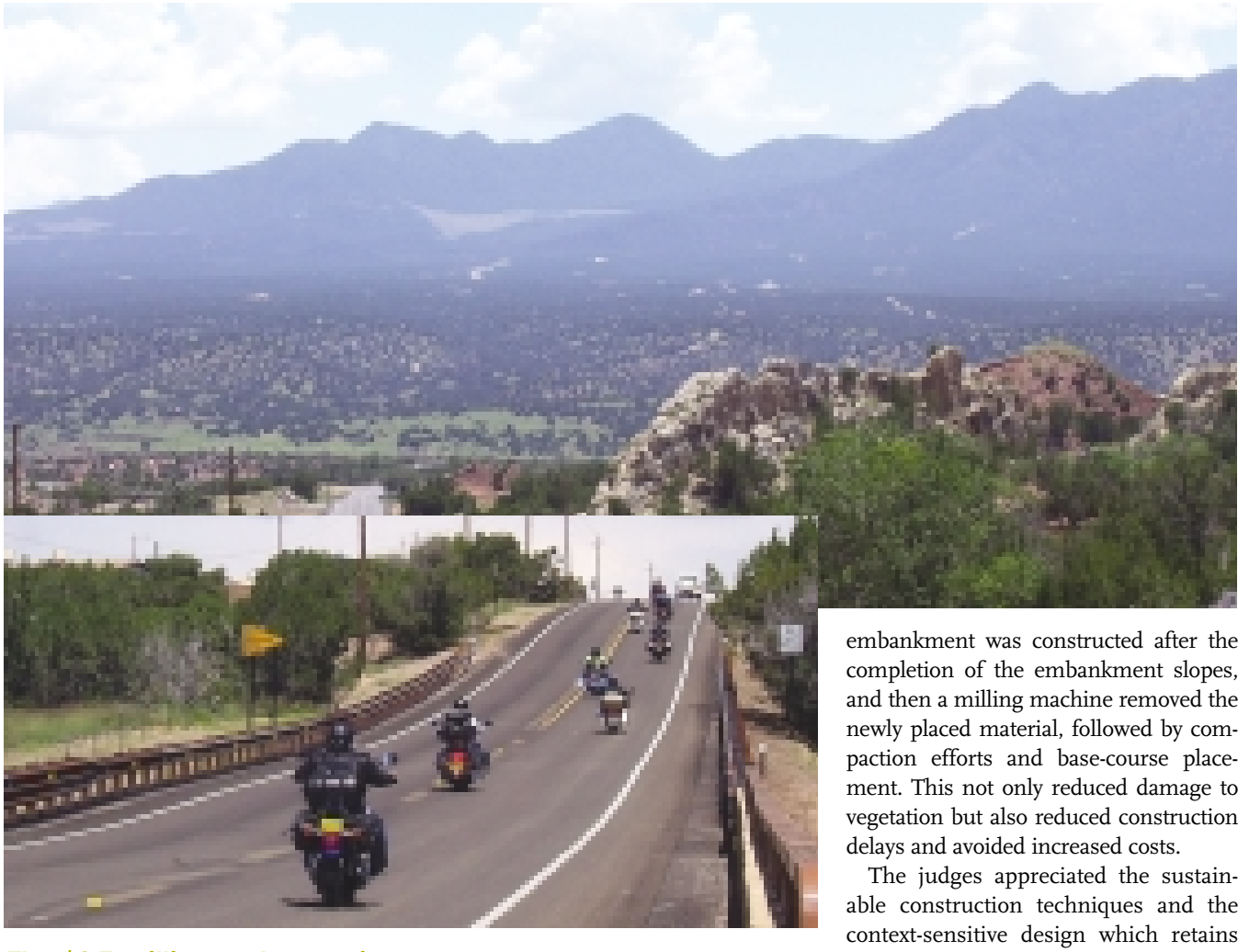
The design had to satisfy public and private needs while the materials and colors needed to balance with the environment. In addition, the building had to be built on budget at $205 per sq ft despite overcoming frequent snow slow-downs.

**Submitted by**: High Desert Investment Corp.; Enterprise Builders Corp. and Dekker/Perich/Sabatini
**Owner:** High Desert Investment Corp.
**Architect:** Dekker/Perich/Sabatini
**Contractor:** Enterprise Builders
**Engineers:** Bohannan Huston; Dekker/Perich/Sabatini; Allied Engineering; MNE Engineering
**Subcontractors**: Chaparral Electric; Noel Co.; Allstate Steel; Edgewood Glass; Yearout Mechanical; Heads Up Landscape; Fairway Inc.

New Mexico Best of 2007

# NM 14 Cerrillos to Lone Butte

## Transportation Project



**The $9.7 million roadway project** comprises 6.25 miles of N.M. 14, a national scenic byway known as the "Turquoise Trail." To the east of the Sandia Mountains, the byway rolls through hills of sagebrush, juniper, piñon and other vegetation. Construction of the Cerillos to Lone Butte segment was completed five months early and over $2 million under budget through value engineering efforts.

Scope included improving safety along the corridor, reconstruction of the roadway, adding shoulders and upgrading two bridges -- all while preserving the special rural character of the roadway.

The community was concerned about minimizing disturbance to the area. Traditional embankment construction involves the use of heavy equipment such as scrapers and loaders to deliver and move borrow material. The construction team felt the more sensible approach was to construct the embankment first by withdrawing the use of scrapers. The embankment was constructed after the completion of the embankment slopes, and then a milling machine removed the newly placed material, followed by compaction efforts and base-course placement. This not only reduced damage to vegetation but also reduced construction delays and avoided increased costs.

The judges appreciated the sustainable construction techniques and the context-sensitive design which retains the corridor's unique character.

**Submitted by:** NMDOT District Five
**Owner/Design:** New Mexico Dept. of Transportation
**Engineers:** NMDOT Central Regional Design; PB
**General Contractor:** Mountain States Constructors
**Subcontractors:** Marron and Associates; Sites Southwest; Surveying Control; AUI

New Mexico Best of 2007

# Center for Integrated Nanotechnologies (CINT) Core Facility

## Public Green Building Project

PHOTOS COURTESY: NICK MERRICK OF HEDRICH BLESSING

**The 96,000-sq-ft** CINT facility at Sandia National Laboratories in Albuquerque includes laboratory, office and research space that contains unique nanoscience instruments. The design of the $22.4 million project was inspired by Pueblo Bonito in Chaco Canyon.

Lab flexibility was essential, as was interactivity. Labs can quickly be switched from wet to dry and back again, while a looping corridor connects lab space and provides several interaction spaces complete with couches and IT connections.

To mitigate vehicular vibrations, the project was set back 400 ft from the nearest major street. In addition, all lab floors have 12-in.-thick concrete slabs isolated from the building structure. The Quiet Labs have fiberglass rebar to mitigate EMI interference, and rigid conduit was utilized throughout the building with twisted wire.

Light is significant in the design. The project includes daylighting into all offices, conference rooms, dining areas and corridors. The design also incorporates a "Ray Slot" in the lobby in honor of the Anasazi's tradition of tracking the sun and moon solstices.

In order to achieve LEED certification, the HVAC system utilizes a six-pipe system for energy flexibility and incorporates a lab waste neutralization system that supplies make-up water to the cooling towers.

**Submitted by:** HDR Architecture
**Owner:** Sandia National Labs: U.S. Dept. of Energy
**Architect**: HDR Architecture
**General Contractor:** Hensel Phelps Construction Co.
**Design Subcontractors**: Compusult; Chavez-Grieves Consulting Engs.; Colin Gordon & Associates; Sites Southwest; Balis & Co.

New Mexico Best of 2007

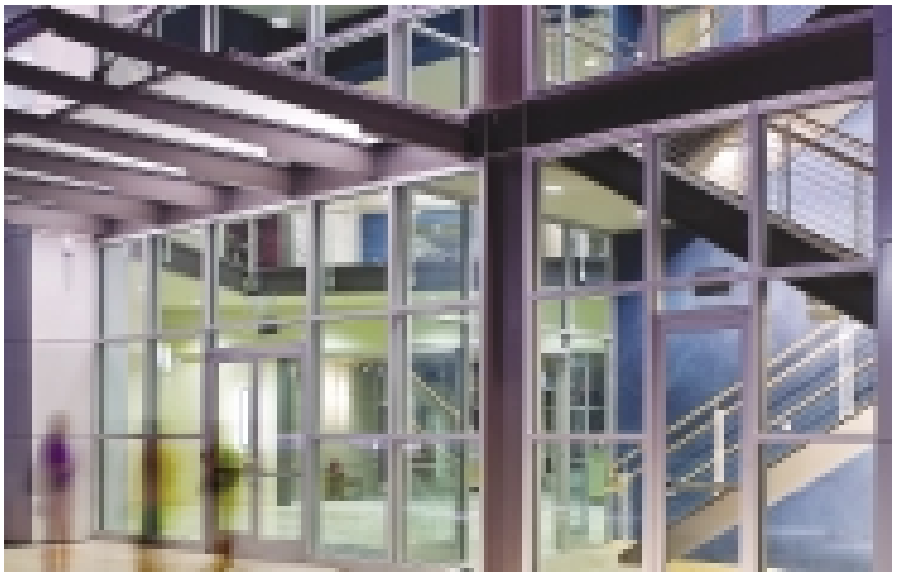
# Jefferson Green @ the Journal Center

## Private Green Project and Interior/T.I. Project Over $5 Million


**At three stories** and 85,000 sq ft, New Mexico's first LEED gold commercial building focused on incorporating meaningful sustainable features in order to use 30% less water and 45% less energy than a typical structure. High-performance glazing is shaded by integral external horizontal shades to balance daylight penetration with energy efficiency. A direct-indirect evaporative cooling system provides efficient operation and an option for "free" cooling using outside air. With an underfloor air system and operable windows, individual control over the environment is available to office occupants.

Plumbing fixtures use 30% less water than normal, including low-flow showers, automatic faucet sensors, and flow restrictors at kitchen faucets. Direct run-off to planted areas promotes natural water harvesting and reduces irrigation requirements. All landscape irrigation is provided by the city's industrial wastewater line to conserve the city's supply of potable water.

Recycled and regional materials as well as low-VOC interior materials were used in construction to promote conservation and occupant health. Urea formaldehyde-free composite wood was used in the interior, while the structural steel has over 90% recycled content. The concrete contains over 20% fly ash, the curtain wall and window frames are made from 45% recycled aluminum, and the carpet in the tenant spaces has over 30% recycled content. Over 80% of the shell construction waste materials were reused or recycled rather than >>



disposed of in a landfill, which means that nearly 4,000 tons of materials were diverted from the landfill.

The exterior of the building blends local traditions with high-tech performance by combining a thick stucco wall perforated by deeply recessed windows with a sleek curtain wall system. The interior features brightly colored floor, wall, and ceiling accents juxtaposed with pale wood, neutral flooring and modern design features. An entryway that opens to two stories and conference rooms with floor-to-ceiling glass walls add to the open interior. Modern furniture and expansive office configurations further carry the spacious theme.

**Submitted by:** Dekker/Perich/Sabatini and Enterprise Builders Corp.
**Owner:** JCC-ONE LLC
**Developer**: RE Davis
**Architect**: Dekker/Perich/Sabatini
**Contractor**: Enterprise Builders Corp.
**Engineers:** Bohannan Huston; Bridgers & Paxton; D/P/S
**Major Subcontractors:** Yearout Mechanical; Chaparral Electric; Amfab; Noel Co.; Western Glass and Glazing; All Seasons Construction; Mountain Shadows; Contract Associates; All American Roofing; Fairway; Goodmans

New Mexico Best of 2007

# San Juan Chama Drinking Water Project Water Pump Station

## Civil/Infrastructure Project

**In keeping with its older** affluent neighborhood, the 120 million gal/day pump station was designed and built to look more like a church, with stucco walls, six-panel doors and a cupola.

The $15.2 million raw-water station receives water from the Rio Grande River and pumps it approximately 5.4 mi to a new water treatment facility. A diversion-dam control system brings the water to the pumping station by way of 26 pneumatic-controlled crest gates.

Twelve pumps capable of moving 94 mgd of unfiltered water will send the water to the treatment facility. An innovative design, the wet well for the pumps has a herringbone configuration with six pumps on each side.

The 12,000-sq-ft building is one of a multitude of facets of the multi-year San Juan Chama Drinking Water Project, which aims to replenish depleted groundwater resources in Albuquerque and provide safe drinking water for the future.

**Submitted by:** RMCI
**Owner:** City of Albuquerque Water Utilities Division
**Engineer:** Boyle Engineering
**General Contractor:** RMCI
**Major Subcontractors:** DKD Electric; Hanna Plumbing and Heating Co.; Industrial Electric Automation; Kenyon Plastering; Precision Masonry

New Mexico Best of 2007

# Albuquerque Studios

## Best Project Management (tie)


**This $58 million fast-track project,** a full-service state-of-the-art film studio, is in the master-planned Mesa Del Sol, just south of Albuquerque.

The 285,000-sq-ft Phase I comprises eight variously-sized sound stages and 78,000 sq ft of office space. Smart-wall partitions, 40 ft high by 1,000 ft long, provide flexibility. A 70,000-sq ft mill building, with production support space and a commissary, was also included in the first phase.

The build included the largest tilt-up concrete panels ever constructed in New Mexico. The 130 panels weigh an average of 97.5 tons each, with the largest at 172,000 lbs, standing up to 75 ft tall. The 500-lb panel braces, to avoid damage to the floor slab, were innovatively rolled into place as the panels went up.

Total permitting, design and construction time was achieved in only 10 months, during often inclement weather at a remote site devoid of any infrastructure.

Due to the fast-track nature of the project, the 180-ft roof trusses were manufactured before the building design was complete. The largest stage can be configured to 134-ft by 180-ft with 55-ft high clearance.

Judges were impressed with the speed and quality of construction, and the positive economic impact the project provides.

**Submitted by:** Jaynes Structures and Chavez-Grieves Consulting Engineers
**Owner:** Pacifica Ventures
**Developer:** Build New Mexico
**Architect:** Dekker/Perich/Sabitini
**Contractor:** Jaynes Structures
**Structural Engineer:** Chavez-Grieves
**Major Subcontractors:** Franklins Earthmoving; Western States Fire Protection; Precision Masonry; Amfab; WW Steel; American National Insulation; National Roofing; Les File Drywall; Harrison Contracting; McDade-Woodcock; Preferred Painting; Hughes Steel

## New Mexico Best of 2007

# New Mexico Rail Runner Phase 1, Belen to Bernalillo

### Best Project Management (tie)

**The $21 million project** provides commuter rail stations, access road and parking areas for the first phase of the state's first commuter rail line serving a growth corridor from Albuquerque to Santa Fe.

Phase I completed the 50 miles between Belen and Bernalillo using rail lines purchased from the Burlington Northern Santa Fe Railway Company.

Each of the nine new station platforms required 135 cu yds of concrete. Construction involved parking areas, platform canopies, detention ponds, installing culvert and piping, landscaping, lighting, signage and retention walls. Designers developed a standard 'kit of parts' for the stations, and by using the same basic materials and designs, it shortened the design and construction schedule. The public could then customize certain set elements to give each station its own local personality.

Coordination and scheduling among the project team and the vast number of outside stakeholders was key. With crews working all along the 50-mi length of the project, mobile project management tools were invaluable.


Crews often worked next to live freight and passenger rail traffic.

Value engineering saved the owner money and the construction team time. The team was able to achieve $8 million in owner-directed change orders, including two additional stations, without impacting the project schedule.

**Submitted by:** HDR Engineering and Twin Mountain Construction II

**Owner:** NMDOT/ Mid-Region Council of Governments

**Engineer:** HDR Engineering

**Other Design:** Dekker/Perich/Sabatini; Otak

**Subcontractors:** Altor Constr.; AUI; Beaty Constr.; Central Denver Ironworks; Highway Supply; McDade-Wodcock; Post-Tensioning Reinf. Svcs.; Sequoia Landscaping; Southwest Lath & Plaster

New Mexico Best of 2007

# University of New Mexico Anderson School of Management

## Higher Education Project

**The 4,500-sq-ft** Student Services Center is an addition to the Anderson School of Management building, which lacked common areas to engage students after class. The $1.8 million project began February 2006 and completed January 2007.

The result is a bright, animated and vibrant campus hub. Warm colors (such as the orange stripe on the carpet and maroon on the upstairs classroom), bold patterns and lighting make this possible.

Central to the two-story building is an atrium covered by solar control glass with tinted accents, offering a beacon to the students as well as great views of the Sandia Mountains. In the atrium is an elevated investment center with 10 flat-screen monitors, which facilitate presentations as well as allow students to monitor financial markets. Both the glazing and the monitor set-up required concealing structural aspects.

The construction team had to meet a strict budget, work in continuously-occupied spaces and meet UNM's rigid energy, noise reduction and maintenance standards. In addition, arson at the main campus library required additional use of the library in the existing building, which increased traffic flow. One particularly innovative solution: The team lowered the new mechanical unit into the library from the skylight.

**Submitted by:** The Hartman + Majewski Design Group and JB Henderson Construction Co.
**Owner:** University of New Mexico
**Architect:** The Hartman + Majewski Design Group
**Contractor:** JB Henderson Construction Co.
**Engineers:** QPEC Engineering; ARSED Engineering Group; Allied Engineering and Design
**Major Subcontractors:** Broken Arrow; Harrison Contracting Co.; Sun Ray Construction; Western States Fire Protection; Southwest Glass & Glazing

New Mexico Best of 2007

# Ventana Ranch Elementary School

K-12 Education Project

**Built for the rapidly expanding** Ventana Ranch community in northwest Albuquerque, the 70,790-sq-ft school encircles a playground area while isolating the kindergarten wing from the upper grades for safety and security. The $10.6 million project began September 2005. Phase I opened December 2006, and Phase II August 2007.

The classroom wings connect through service spaces such as administrative offices, the media center and cafeteria. On their south façade, the six kindergarten classrooms are set off by primary-color CMU towers, which also have geometric-shaped fenestrations for wayfinding.

Unique internal and external community spaces allow for intermingling and school activities. For instance, at the intersection of the media center, administrative offices and cafeteria, a lobby space hosts school band concerts, teacher conferences and student art exhibits. Materials such as stucco, metal panels and primary colors enliven the exterior and interior.

The major challenge: Get the school quickly operational for the growing community. While the multi-phase construction was designed and constructed, the team created a portable campus as well as parking, drop off and bus lanes to support the temporary and permanent facilities.

**Submitted by:** FBT Architects
**Owner:** Albuquerque Public Schools
**Contractor:** Shumate Constructors
**Architect:** FBT Architects
**Engineers:** The Response Group; Walla Engineering; Jeff Mortensen Associates
**Major Subcontractors:** Harrison Construction; Beaty Construction; Les File Drywall; Southwest Glass & Glazing; Hughes

## New Mexico Best of 2007

# Santa Fe New Mexican

### Renovation/Restoration Project (tie)

**In downtown Santa Fe's** historic district, this $4.7 million project is the second phase of a two building project for the "West's Oldest Newspaper."

This 29,500-sq-ft building reinvigorated the six-decade-old building for use by the staff and to house the printing facilities. The renovated building includes 6,800 sq ft of new mezzanine space.

Adhering to Santa Fe's Historic Design Code was the major challenge. The original building was gutted, and a later addition to the building was demolished. The finished building features exposed ceilings, including original wooden and steel trusses and ductwork as well as skylights and windows. The lobby has new timber beams, and the mezzanine offers a stainless steel railing and cable system.

New electrical and mechanical systems were also designed. The roof is a thermo-plastic poly-olefins system, and the exterior is elastomeric stucco. To recycle water run-off, the team installed a 10,000-gal water-capture system.

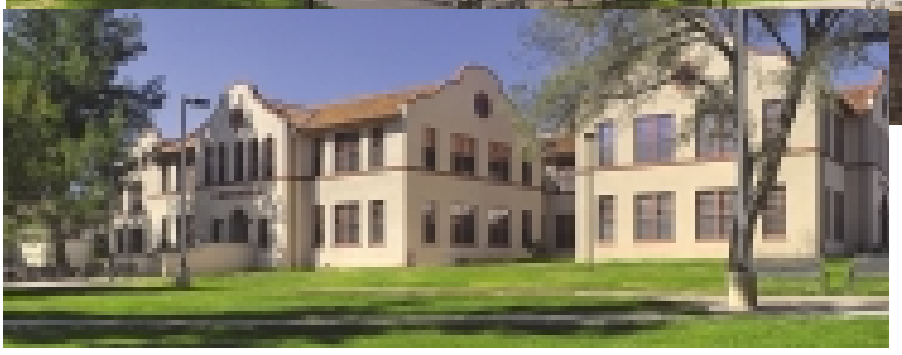
That the original building was out of square created layout difficulties inside. Outside, there was limited area for staging, materials parking and snow storage. The team had to work within height restrictions as well.

**Submitted by:** John G. Rehders General Contractor
**Owner:** The New Mexican
**Architect:** Architectural Alliance
**Contractor:** John G. Rehders General Contractor
**Engineers:** Arsed Engineering; Peak Power; ABQ Engineering
**Major Subcontractors**: Gilmen Electric; Hanna Plumbing and Heating; National Heating and Air Conditioning; Mesa Steel; Lopez Roofing; Beaty Construction

New Mexico Best of 2007

# Cramer Hall Addition and Renovation
# N.M. Institute of Mining and Technology

**Renovation/Restoration Project (tie)**



**This $6.4 million project** consists of a remodel of the historic 1928 classroom building and an addition of a new classroom building wing. The construction team made structural modifications, updated HVAC and plumbing, added fire protection and contemporary communications such as computer connects and video conferencing.

The addition was designed and constructed to look as though the entire project had been completed contemporaneously. The exterior incorporated 8-ft 5-in.-tall wood double-hung windows, curved roof parapets and tile roofs. The interior includes wood doors and frames, wood chair rails and handrails as well as wood trim, again in keeping with the original building.

The team had to demolish part of the existing building for the new addition while ensuring that the historic building would not be compromised. A shoring system was placed to support the historic building while the new basement and foundations were placed. Due to Cramer Hall's location in the middle of the campus, materials delivery had to be closely monitored to ensure the safety of students and staff.

**Submitted by:** Bradbury Stamm Construction and Van H. Gilbert Architect
**Owner:** New Mexico Institute of Mining and Technology
**Architect:** Van H. Gilbert Architect
**Contractor:** Bradbury Stamm Construction
**Major Subcontractors**: Robles & Sons; Romero Truck and Tractor; Ulibarri Construction; Supreme Contracting; Les File Drywall; Miller Bonded; Howe Enterprises

New Mexico Best of 2007

# Advent Solar

## Industrial/Warehouse Project


**The developer** of the 12,900-acre Mesa Del Sol employment center in southeast Albuquerque wanted a high-tech sustainable design for its first building: the 87,600-sq-ft Advent Solar warehouse. The resulting $4.9 million shell is designed to draw equally-minded tenants to the center. A galvanized, corrugated metal tower at the northeast corner promotes industrial high-tech aesthetic while serving as the entryway.

Concrete-panel bearing walls and a steel post-and-beam system form the structure. The exterior includes tilt-up panels, steel-screen shading devices with perforated aluminum panels, oversized pipe downspouts and corrugated galvanized metal wall panels. Punched storefront windows provide day lighting and views for the office portion, while large overhead glass doors light the warehouse space.

The building is designed to accommodate a second floor for an additional 40,000 sq ft. Photovoltaic panels will be mounted to the screens to produce some of the building's electricity.

This is one of the first LEED-certified office warehouse buildings in New Mexico, under the new Core and Shell program. The most prominent green feature are the two 15,000-gal water-capturing tanks at the north façade of the structure.

**Submitted by:** Dekker/Perich/Sabatini
**Owner:** Forest City Covington N.M.
**Architect:** Dekker/Perich/Sabatini
**Contractor:** Klinger Constructors
**Engineers:** Bohannan Huston; Chavez Grieves; Bridgers & Paxton
**Major Subcontractors:** Chaparral Electric; Yearout Mechanical; Western States Fire Protection; Metal Depot; AmFab

New Mexico Best of 2007

# US 550/Arroyo Peñasco Retaining Wall

## Engineering Design

**The construction team** on this project found a unique solution to erosion control: roll out used tires to stop an arroyo from eroding a right of way.

The $490,000 project began June 2006 and was completed September 2006.

Along US 550 northwest of San Ysidro, the meandering Arroyo Peñasco, with vertical banks, was cutting into the highway right-of-way, so much so that in just one year it had devoured 15 ft laterally, leaving the right-of-way fence suspended 30 ft in the air.

A local supplier had 34,000 recycled tires that would become the center of the wall: The tires are compressed and wire bound into rectangular bales. The tires would be environmentally sound, long lasting and would be diverted from the landfill.

The designer produced this first-of-its-kind wall as a "T"-type reinforced earth wall, 250 ft long and 15 ft tall with 10 ft of exposed height. It retains about 30 ft of earth fill and is rock-faced to cover the tire bales.

The project has successfully stabilized the erosion and returned the arroyo back into its historic path.

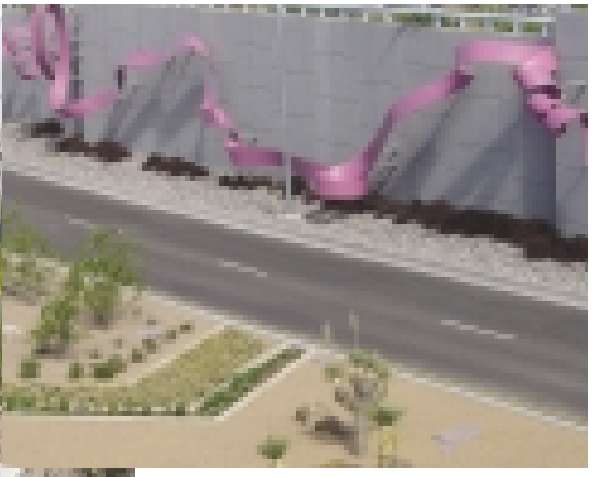
The judges praised the project for its innovative use of materials and its pleasing aesthetics.

**Submitted by:** PB
**Owner:** New Mexico Dept. of Transportation
**Land Owner:** Pueblo of Zia
**General Contractor:** Khani Co.
**Engineer:** PB
**Other:** U.S. Army Corps of Engineers; Terracon; Cordova & Sons

New Mexico Best of 2007

# Albuquerque International Sunport Landscape Improvement

## Landscape/Hardscape Project



**The $2.9 million airport** gateway project transformed eight acres of water-consuming landscape into a xeric environment showcasing New Mexico's diverse climates terrains and cultures. The project includes median and adjacent landscaping and artwork as well as walls and terraces that echo the Pueblo architecture of the Southwest.

The landscape team had to overcome a number of site challenges. Steep slopes along Sunport Boulevard were stabilized with retaining walls. An impervious barrier buried under unstable fill dirt due to a former landfill on the site was eliminated. A low-water irrigation system that was sensitive to the desert environment was installed.

Native and drought-resistant flora step up the slopes of the project to indicate the different climatic zones, with the tops suggesting tree-covered mountains, the slopes transitional zones and the medians the Chihuahuan Desert. Similarly, the retaining walls are faced with local sandstone and stacked to resemble Chaco Canyon. Solar lighting was used throughout, with LED lights and info signage welcoming airport visitors.

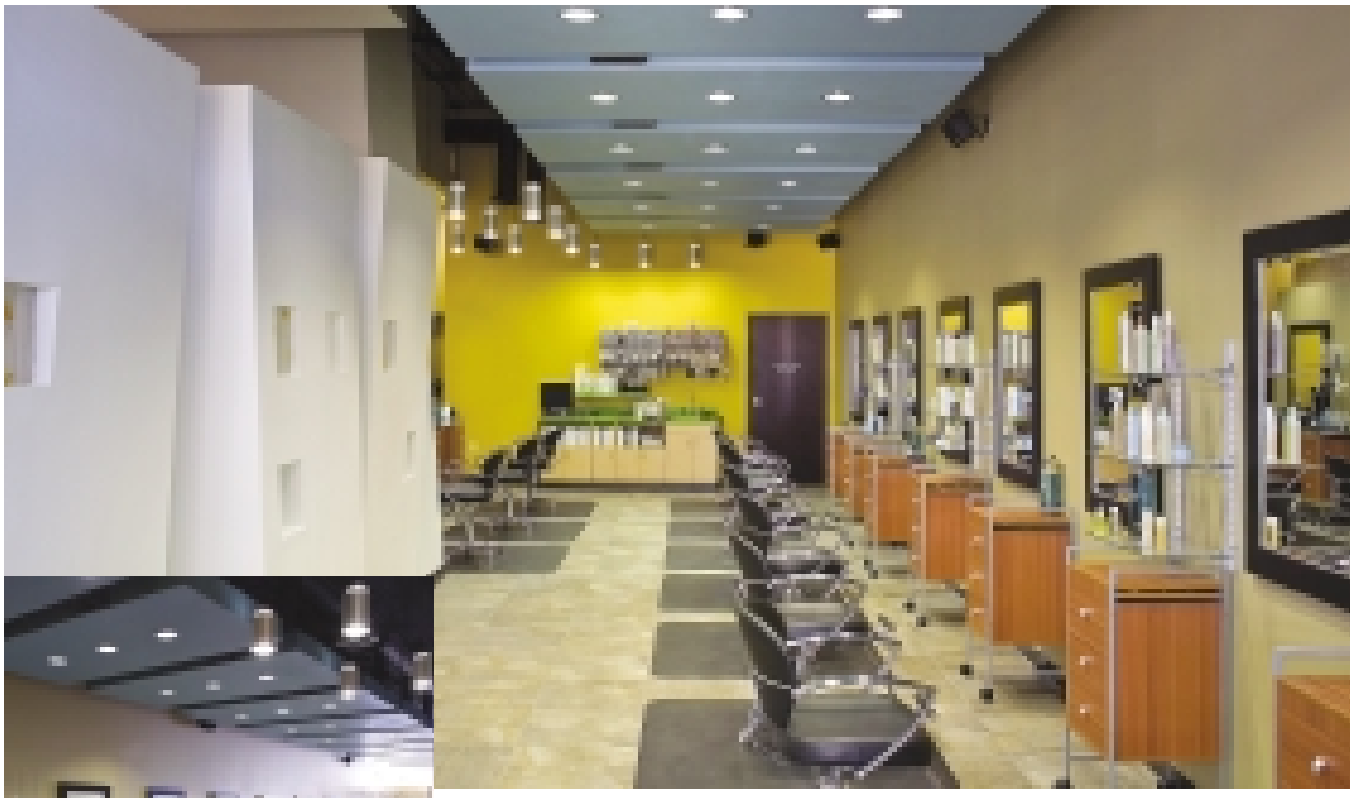
Artwork was incorporated, including Native American pots and "La Serpentina," an 800-ft-long, 12,300-lb metal sculpture that adds texture and vibrancy to the walls.

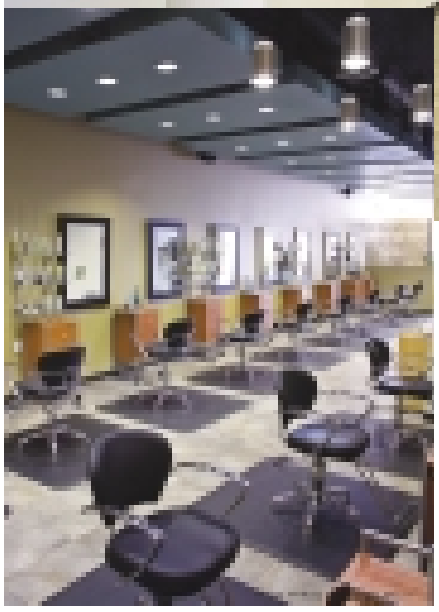
**Submitted by:** Sites Southwest
**Owner:** Albuquerque Intl. Sunport
**Architect:** Sites Southwest
**Contractor:** Westwind Landscape Construction
**Engineer:** Bohannan Huston
**Subcontractors:** Zeon Signs; Brooks & Clay; Yearout Electric

## New Mexico Best of 2007

# Mark Pardo Hair/Skin/Body

### Interior/T.I. Project Under $5 Million





**The 3,375-sq-ft salon/spa,** in a strip shopping center in Albuquerque, fulfills three functions: as a street-visible retail store; an energetic salon; and a quiet and calming spa. The $420,000 project began April 2007 and was completed May 2007.

Distinct areas were created to provide acoustical and visual privacy for customers, while also encouraging flow between them. Textured materials were used to define the space with accompanying planes that encourage flow into the manicure/pedicure spa lounge and treatment areas. Materials included steel stud with gypsum board, porcelain tile, Italian laminate and three-dimensional wood paneling.

Tilted gypsum board walls organize the space and were designed to emulate wiggling fingers and toes. These walls separate the retail and salon from the manicure and pedicure spaces. A series of cut-out windows spells "Escape" in Braille.

The spa lounge includes textured wall panels and translucent panels embedded with ginko leaves and thatch. The central form is a round bench that divides the room into pre- and post-treatment areas. Seating niches along the perimeter offer personal space in the colorful, vibrant room.

**Submitted by:** Mullen Heller Architecture
**Owner:** Mark "Pardo" Gonzales
**Architect:** Mullen Heller Architecture
**Contractor:** Klinger Constructors
**Engineer:** Sonalysts
**Subcontractors:** ACIE-Albuquerque Cabinets; Rocket; Dwight's Glass and Mirror; Pelletier Construction; JTC; Harrison Contracting; Business Environments; Mechanical Concepts; Sundance Mechanical and Utility; McCrary Electric Co.; Interlam

New Mexico Best of 2007

# Jefferson Green @ the Journal Center

## Mechanical/Electrical Project

**The design-build,** three-story building achieved LEED gold certification in part due to its highly efficient mechanical systems. The 85,000 sq ft building in Albuquerque uses 30% less water and 45% less energy than typical structures.

Two Trane Acer 44,000 cfm roof-top units utilize both direct expansion and evaporative cooling, and also allows for the option for cooling with just the natural, outside air. The underfloor ducts supply air via a raised floor with adjustable floor diffusers. With the addition of operable windows, office workers will be able to customize their individual environments.

The $1.36 million mechanical contract also included two, 1-million btu boilers that provide perimeter heat using variable air volume boxes for separate zoning demands.

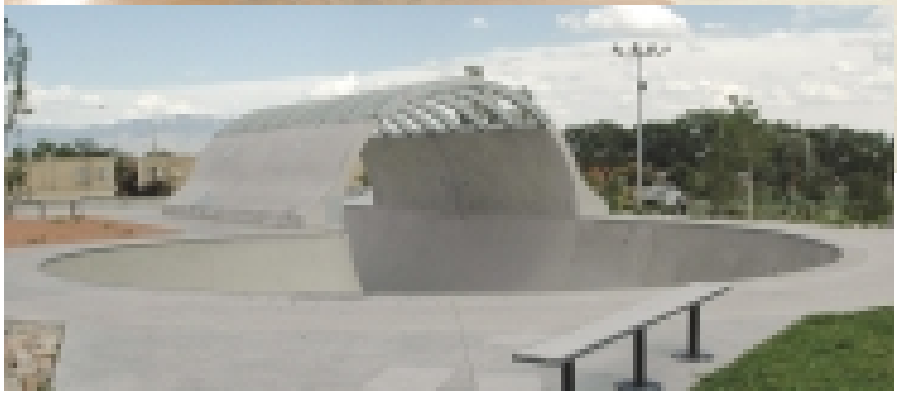
Plumbing fixtures use 30% less water than normal, including low-flow showers, automatic faucet sensors, and flow restrictors at kitchen faucets. Direct run-off to planted areas promotes natural water harvesting and reduces irrigation requirements. All landscape irrigation is provided by the city's industrial wastewater line to conserve the city's supply of potable water.

**Submitted by:** Dekker/Perich/Sabatini and Enterprise Builders Corporation
**Owner:** JCC-ONE LLC
**Architect:** Dekker/Perich/Sabatini
**Contractor:** Enterprise Builders Corporation
**Mechanical/Electrical Engineer:** Bridgers & Paxton
**Mechanical Contractor:** Yearout Mechanical
**Electrical Contractor:** Chaparral Electric

New Mexico Best of 2007

# City of Albuquerque Alamosa Community Center Skate Park

## Concrete Project



**The $2.1 million project** recreates the concrete arroyos and other features throughout Albuquerque that have attracted skaters from throughout the country. The park includes concrete walls, concrete stairs, large and small bowls, a radiused bridge and grind rails.

Completed in March, the park offers two distinct skating areas. The Skylit Bowl offers advanced skaters a 3/4 pipe with 11-ft sidewalls. Smaller bowls are incorporated into the sides and ends for less-experienced skaters. The concrete finishers displayed great skill in forming the concrete, marble coping and smooth transitions. Innovative construction methods were developed in the field to produce precast concrete upper elements of the pipe so that proper bowl curvature could be attained.

The second area, the Trenches Street Park, incorporates rails, steps, lips, gaps and volcanoes - the stuff of street skaters' dreams. To provide context, the design incorporates some of the city's older and more popular skate features such as those found on the UNM campus, Civic Plaza, McCollum Elementary and the arroyos, but in an environment where such features can be ridden legally.

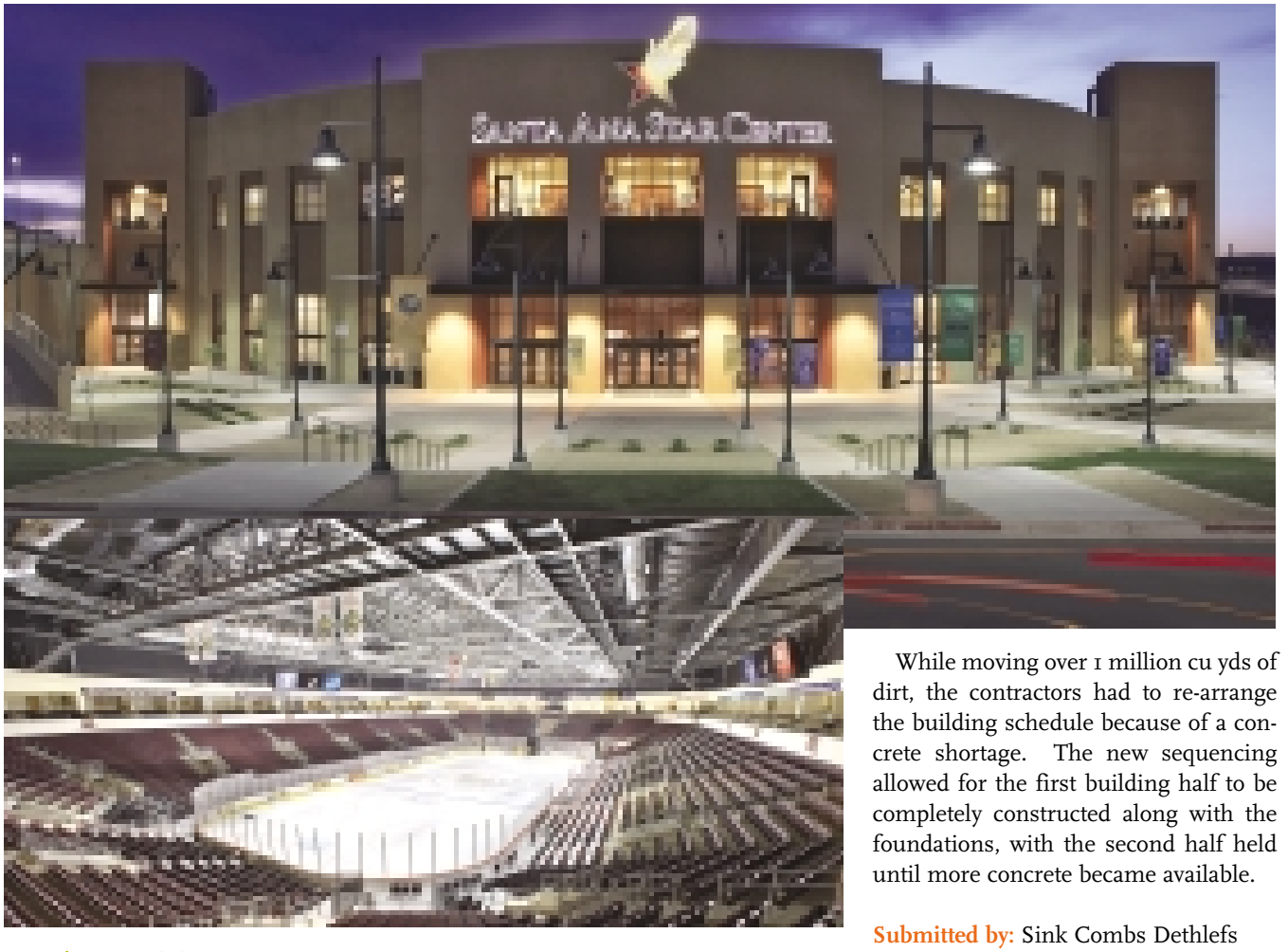
Skaters have already given their stamp of approval to the park's smooth, hand-finished concrete, so essential to successful and safe skating.

**Submitted by:** FacilityBUILD and Walla Engineering
**Owner:** City of Albuquerque
**Architects:** Morrow, Reardon, Wilkinson & Miller; Artifex Integrative Skatepark Environments
**General Contractor**: FacilityBUILD
**Structural Engineer:** Walla Engineering
**Concrete Contractors**: California Skate Parks; K.L. House Construction Co.
**Other:** Lee Landscapes; Premise

## New Mexico Best of 2007

# Santa Ana Star Center

### Steel Project Over $5 Million




**The $32.2 million** event center is the centerpiece in a new city center for Rio Rancho that will eventually include a city hall, restaurants, specialty retailers, a movie studio, theaters and other facilities.

The 258,000-sq-ft facility seats up to 9,200 for events such as hockey, basketball, concerts, conventions, trade shows and meeting assemblies.

Incorporating vernacular New Mexico design, the building includes 31 luxury suites with four party suites, a suite lounge, club lounge, concessions, locker room facilities and offices for the primary tenant, the New Mexico Scorpions hockey team.

The extensive use of enclosed steel and light-weight roof meant the project used only 300 tons of steel. High winds and bad weather slowed the steel installation and impacted site work because of dust. In addition, above-average summer rains caused flooding, requiring additional site grading and very close coordination for roof construction and the completion of interior finishes.

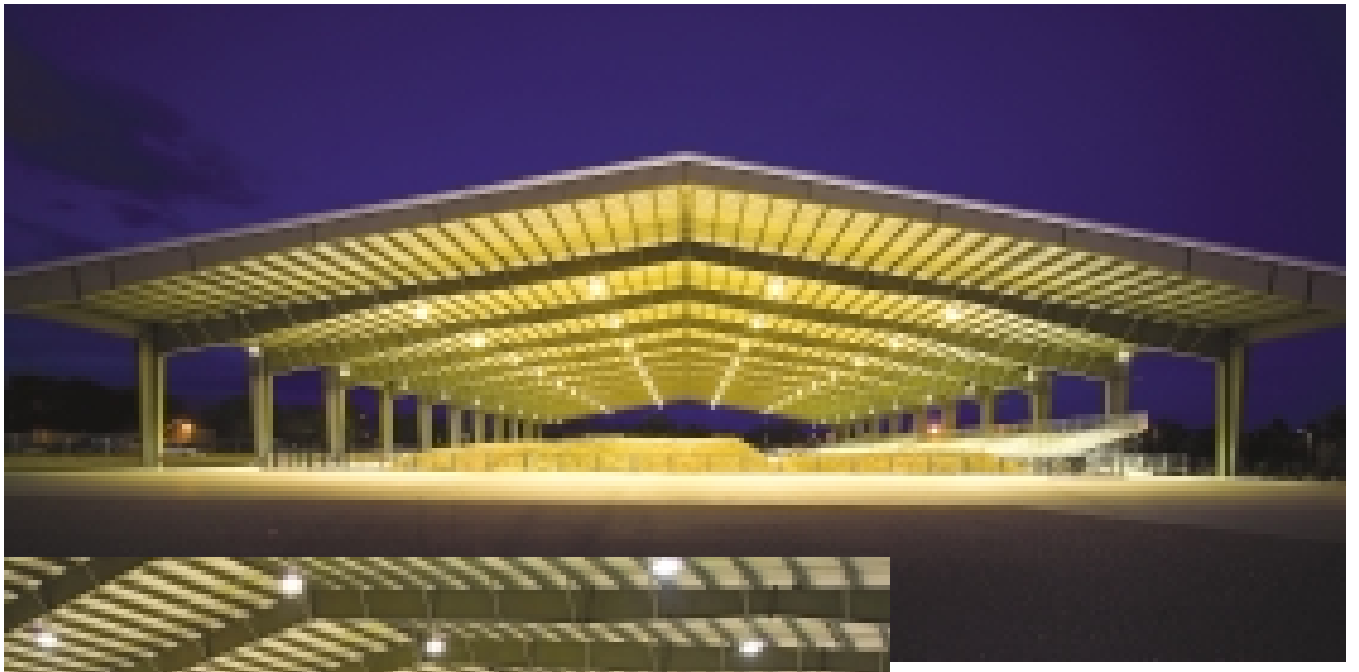
While moving over 1 million cu yds of dirt, the contractors had to re-arrange the building schedule because of a concrete shortage. The new sequencing allowed for the first building half to be completely constructed along with the foundations, with the second half held until more concrete became available.

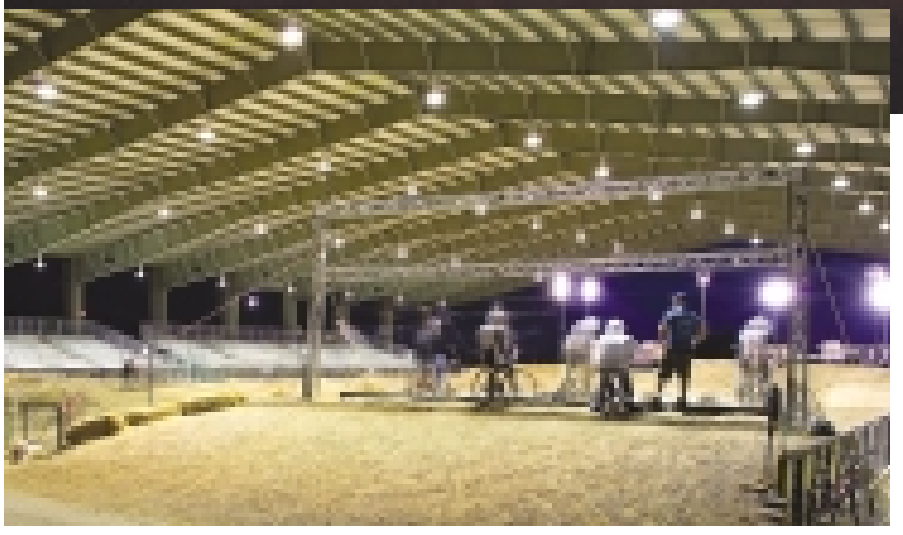
**Submitted by:** Sink Combs Dethlefs and Hunt/Bradbury Stamm Joint Venture
**Owner:** City of Rio Rancho/ International Coliseums Corp.
**Architect:** Sink Combs Dethlefs
**General Contractor:** Hunt/Bradbury Stamm Joint Venture
**Structural Engineer:** Martin/Martin
**Other Engineers:** M-E Engineers; PB
**Steel Contractors:** Alamo Steel; Bosworth Steel Erectors
**Subcontractors:** Coreslab Structures; Yearout Mechanical; Theco Electric

New Mexico Best of 2007

# Albuquerque Veloport BMX Pavilion

## Steel Project Under $5 Million





**The first phase** of the Albuquerque Veloport, the 81,000-sq-ft BMX Pavilion, is the only high-altitude, fully covered BMX racing facility in the United States. The $4.3 million facility is Olympic standards quality. The metal building measures 230 ft by 330 ft with a height of 55 ft. Four ft below grade, the 150-by-300-ft earth floor competition area is framed by concrete walls. The grandstands seat 2,800 with a north grandstand to be added later.

To ensure opening in time for a major competition, the team worked an accelerated construction schedule. For cost-effectiveness, the architect chose a long-span pre-manufactured steel structure. The general contractor determined that a design of 40-ft-deep, 5-ft-wide drilled piers, by separating superstructure footings from the other concrete work, would help expedite the project as well. The pit retaining walls were then constructed with the piers and the superstructure.

Other challenges included canting vertical bents outward to ensure unobstructed sightlines from the bleachers as well as building through the wettest summer and winter on record.

The facility opened in time to successfully host the American Bicycle Association Fall Nationals in October 2006.

**Submitted by:** Gerald Martin General Contractor
**Owner:** City of Albuquerque
**Architect:** Kells + Craig Architects
**Assoc. Architect:** G. Donald Dudley
**General Contractor:** Gerald Martin
**Major Subcontractors:** Hughes and Associates; Rockscapes; Lee Landscape; Custom Grading

New Mexico Best of 2007

# I-40, Carnuel to Tijeras

## Editor's Choice, Engineering Design

**This transportation corridor** bisects the Rocky Mountain range, an area that provides for wildlife habitats. Vehicle-wildlife collisions were a concern in the area, so the 4.2-mi project was undertaken to rehabilitate seven bridges, improve drainage and signage, construct barrier walls, median breaks, and wider shoulders, and create, for the first time in the state's history, special fencing to protect wildlife.

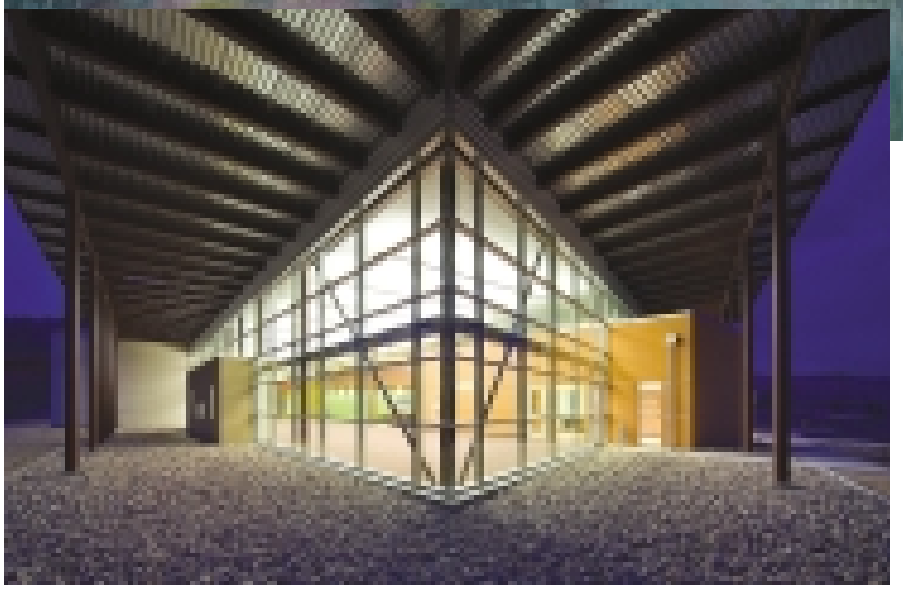
The wildlife gaming fence uses modern technology. Along with the electrified gaming fence, infra-red cameras were installed for detection of wildlife as a means of alerting motorists to slow down to avoid collisions. Permeability points were identified as locations of routes either under or over the roadways with sufficient openness to allow the free passage of wildlife. Vegetation was removed at key points to afford an open-field view under bridges for wildlife. Environmental impacts on a natural spring that is a water source for wildlife were considered, and protective measures were instituted to avoid its contamination. Traffic volume of more than 50,000 vehicles a day, winter conditions, and a one-year timeframe were some of the challenges faced on this project.

**Submitted by:** New Mexico Dept. of Transportation-District Three
**Owner:** New Mexico Dept. of Transportation
**Stakeholders:** New Mexico Game and Fish; U.S. Dept. of Agriculture Forest Service
**Design:** NMDOT
**Contractor:** Mountain States Constructors
**Wildlife Fence:** Electrobraid Fence Co.
**Major Subcontractors:** AUI; Valley Fence; Superior Construction Services

New Mexico Best of 2007

# Loma Colorado Public Library

## Honorable Mention, Public Project Under $10 Million



**This new 32,000-sq-ft library** contains a multi-purpose room, children and adult collection rooms, an electronic resource lab, meeting rooms and staff administration areas. The project also includes staff and public parking, a drive-up book drop, walkways, irrigation and landscaping.

The project was constructed under a Government Mandated Labor Agreement which led to an extensive and creative value-engineering process. The building did not suffer in project scope or functionality. Significant cost reductions were achieved by changing burnished block walls to standard colored and reducing the number of colors to five; replacing plaster finishes with paint; changing out the electrical lighting package and reducing the number of copper signs. Innovative scheduling and materials were utilized on the project and a revision of the seismic design substantially reduced steel costs.

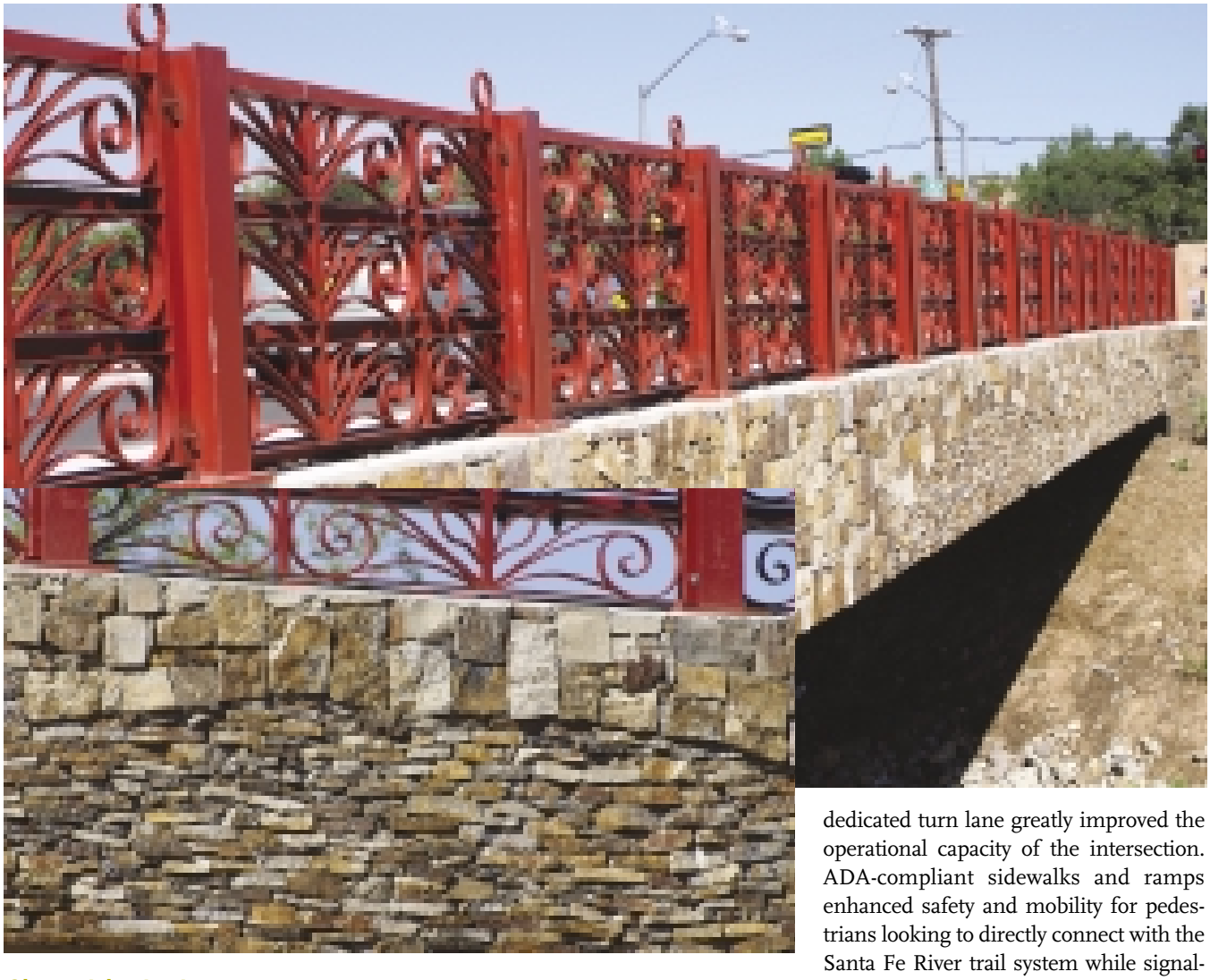
While the budget, weather, schedule and LEED aspects presented numerous challenges, the team collaborated to overcome them and deliver the final product.

**Submitted by:** Jaynes Corp.
**Owner:** The City of Rio Rancho
**Architect:** Hidell Associates Architects
**General Contractor:** Jaynes Corp.
**Other:** Wilson & Co.; RL Goodsen Jr. Engineers; Les File Drywall; McDade Woodcock; Precision Masonry; Queston Construction; Southwest Glass & Glazing; Yearout Mechanical

New Mexico Best of 2007

# Camino Alire Bridge and Intersection Improvements

## Honorable Mention, Transportation



**Situated in the heart** of one of Santa Fe's oldest neighborhoods, Camino Alire provides one of few connections to the rest of the city. The original Camino Alire Bridge, constructed in 1958 over the Santa Fe River, was a 3-span channel beam bridge supported by piers on foundation piles. The new bridge, completed in April 2007, is a single-span, pre-stressed concrete, box beam bridge. This construction minimized the impact to the river and provided increased hydraulic capacity while reducing construction time and inconvenience to the public.

The bright red decorative bridge rail meets Department of Transportation traffic standards and helps maintain the image of the surrounding historically significant area. Intersection improvements and widening of the roadway to include a dedicated turn lane greatly improved the operational capacity of the intersection. ADA-compliant sidewalks and ramps enhanced safety and mobility for pedestrians looking to directly connect with the Santa Fe River trail system while signal-equipment upgrades improved the intersection for area drivers.

**Submitted by:** Wilson & Company
**Owner:** City of Santa Fe Public Works
**Engineer:** Wilson & Comnpany
Engineers & Architects
**Contractor:** A. S. Horner
**Subconsultant:** Marron & Associates
**Artist:** Susan Wink <<