Donald A. Bertram is a practicing attorney and a licensed architect with the firm of Bertram & Associates located in Denver, Colorado. Mr. Bertram is experienced in all aspects of design, construction and business law.

At the dawn of the computer age, the rally cry was “computers, and especially CADD for architects, are going to make our lives easier and more productive, giving us more leisure time.” We all know this has not happened.

There have been some unintended consequences of this computer revolution. One major area of concern is owners, contractors and subcontractors requesting, instead of prints—copies on a disk (electronic/digital data file) or even transmitting the files by electronic transmission—by modem.

Electronically transmitted files and files on disks can be altered by the receiver. There are presently no mechanisms available to prohibit this. An architect’s drawings and specifications (the instruments of service) and actual design in whatever media, paper or electronic, are copyright protected property of the architect.

The owner has the right and the expectation to receive these instruments of service. However, the use of these must be clearly understood and set forth in the O-A Agreement—AIA B141-1997, Article 1.5—“Scope of Services and other Special Terms and Conditions” is appropriate to set forth that the owner can purchase these instruments of service in electronic/digital media at a specified price; provided, owner has executed a separate Electronic/Digital Media License Agreement (see below).

The architectural designed residential projects at least once a month through a new feature called “Architect’s Choice” in the Sunday edition of the Rocky Mountain News on Sunday has a circulation of 416,000 along the Front Range.

The idea—to showcase outstanding residential design by architects—has been a longstanding success in other cities. Now, the Rocky Mountain News and AIA Colorado have teamed to feature architectural designed residential projects at least once a month through a new feature called “Architect’s Choice” in the Sunday edition of the Home Front section.

By providing CADD files to the owner, the architect can provide an invaluable service, provided the architect takes the necessary precautionary steps, which include a License Agreement and making and keeping an electronic as well as a hard copy of each set provided.

(This article was written to provide general legal information intended to be accurate although not comprehensive. Accordingly, readers are urged to consult their attorneys for any specific legal advice they may need concerning the subject matter of this article.)
1998: BEGINNING OF A NEW ERA

"Restructuring," "reunification," "the unified AIA in Colorado:" we have all heard these various terms used to describe the journey to consolidate the AIA Colorado and AIA Denver offices into one, and to provide staff support to the previously unstaffed North, South, and West Chapters.

We have made great strides in accomplishing our goals. Joe Jackson, Assoc. AIA was hired to direct AIA Colorado. Joe was previously the staff of AIA California and brought with him the knowledge and professionalism of a large state AIA chapter. Daphne R. Scott-Monroe, Assoc. AIA was hired to direct AIA Denver. Daphne was trained as an architect and worked previously with non-profit groups. Both Joe and Daphne brought a new degree of professionalism to the AIA offices.

Together they developed the new staffing and budget model to provide centralized staff support to all the local chapters. This plan will be implemented in 1998. The new budget will not be with us to see this model through. We will be pursuing other professional interests. We thank her for her efforts in a very challenging year for AIA Denver, and wish her the best in her new endeavors.

This year will be a pivotal one for AIA in Colorado. The restructuring model is still evolving. Our work is far from over in terms of working out the details of the reunification, and I am calling for the support of all AIA members across the state to help make this succeed. We should be approaching the restructuring with a positive attitude and with the conviction that it can and will work. We need to constantly reaffirm our conviction that what we are doing is providing a greater level of support to each and every AIA member in Colorado. All this will not happen without some pain and misgivings, but if we keep our intentions high, we will be able to work together to find the right way.

By the time this newsletter goes to press, AIA Colorado will have had its board retreat on January 24. I have asked all the local chapter representatives to come to the retreat with a list of concerns for the coming year in terms of staff support and the restructuring model. I am committed to addressing all concerns in an open and thoughtful manner. We will probably not resolve all of the issues immediately, but hopefully we will establish a process by which all the issues can be addressed and resolved.

I am confident that by this time next year we will be a stronger and more unified organization than we are now, and we cannot do it without the support of our members. If any of you have any questions, concerns, or just want to talk about it, please call me at 303.830.9725, write me at Abo@copelandarchitecture.com, 1600 Downing Street, Suite 700, Denver, Colorado 80218, or e-mail me at rkab@arch.com.

—Ron Abo, AIA

CPI Conference

How should deteriorating masonry be repaired? When do you replace versus repair windows? What are new substitutes for historic roofing materials? These and other preservation topics will be presented at Colorado Preservation, Inc.'s statewide conference, "Saving Places: Preservation Strategies for the 21st Century" on February 6-7, 1998. "It's an excellent opportunity for architects to learn the technical aspects of historic preservation, which is an ever-growing percentage of today's client base," says architect, Nan Anderson, president of CPI. The Conference, co-sponsored by AIA Denver, will be at the Denver Athletic Club. Early registration is encouraged. Call CPI at 303.893.4260. We'll see you there!

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Web site: www.aiacolorado.org
Next Generation of AIA Contract Documents

In October, The American Institute of Architects published updated versions of its Owner-Architect Agreement (B141) and the General Conditions (A201) to its Owner-Contractor Agreement. These contract documents are intended to provide the basic framework for the traditional owner-architect and owner-contractor relationships on typical design-build projects.

Given the AIA's proven track record, the new documents are expected to receive wide acceptance even though they include controversial changes, which could have a dramatic impact on the relationships of the parties.

For over a century, the AIA contract documents have established construction industry standards throughout the country. No other set of forms has done more to define the roles, rights, and responsibilities of project owners/developers, design professionals, contractors; and subcontractors involved in private construction projects.

The last changes to B141 and A201 were made in 1987, and the AIA has published its new documents in hopes of balancing and allocating project risks more fairly among the parties. While there already has been considerable debate, only time will tell whether the AIA has been successful creating new standard-form documents usable nationwide, which will help keep projects on solid financial footing and reduce the likelihood of litigation.

A201, General Conditions to the Owner-Contractor Agreement, is the most widely used set of general conditions in construction contracts for private projects in the United States. It has done more than any other contract document to set the rules for construction projects.

The most controversial change in new A201 is a provision which attempts to delegate certain design responsibilities to contractors. This change reflects the concerns of architects who do not want to be responsible for design details typically prepared and performed by contractors and suppliers, as well as architects' desire to have contractors and suppliers hire qualified, licensed professionals to prepare or review and seal highly specialized shop drawings and other submittals.

A divided Board of the Associated General Contractors of America has endorsed new A201. A good argument can be made the controversial design delegation provision merely recognizes what has been happening for years on most private construction projects.

Other significant changes to A201 address:
- Waiver of consequential (not direct) damages, other than liquidated damages, by owner and contractor. This change has been referred to as "Tort Reform," which is intended to prevent owners and contractors from stating claims for speculative damages arising from risks of loss that were not bargained for by the parties.
- Mandatory, nonbinding mediation as a condition precedent to binding arbitration or mechanics' lien litigation. This provision is intended to greatly reduce the likelihood of protracted arbitration and litigation proceedings. However, it doesn't provide for the joint or consolidation of claims by owner against architect for purposes of the mediation process between owner and contractor, absent the consent of the parties.
- Termination of the construction contract by owner for convenience. This change is expected to standardize an accepted industry practice which allows termination by owner without cause, but with reasonable compensation to contractor.
- Deletion of architect's "observation" of work. This concept has been eliminated from all new AIA documents and is being replaced with an "evaluation" concept. No "supervision" of the work is required by architect.

Remediation of hazardous materials. Procedures will address unsafe materials in addition to asbestos and PCBs.

Correction of the work. Contractor's contractual one year correction responsibilities are differentiated from contractor's contractual express warranties, which extend beyond one year from the date of substantial completion. Changes in the work. The procedures and the responsibilities of owner and contractor for making changes have been clarified.

Payments. Procedures regarding progress payments, payments to subcontractors, payments not in dispute, under construction change directives, and reduction of retainage have been clarified. Projects involving multiple dates of substantial completion have also been addressed.

[See CONTRACTS on page 15]

Letters Policy

The Colorado Architect welcomes all letters. Letters must be signed with name, street address and daytime phone number. The opinions expressed do not necessarily represent the opinions of the AIA Colorado Board of Directors or its membership.

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Better performance with better theory
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Designing instruments of measurement
Designing the sports landscape
The street as a playing field
Keeping geese off the golf course
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Designing symbols for brand recognition and product loyalty
Experience and substitution:
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These and other design issues will be explored by product designers, architects, sports analysts, writers, scientists, coaches, graphic designers, media and marketing executives, city designers, photographers, interior designers, software designers, athletes and others. They come to think about what's next. They come because design matters. And they come because the International Design Conference in Aspen is just what its name implies: international in scope; about design rather than about designers; a conference, not a convention; and held in a setting marvelously suited to the practice of thought and vision. In Aspen. In a new conference format. June 3 to 6. To register or for more information, please call 970.925.2257.

J.B. Jackson and American Landscape Conference

The University of New Mexico School of Architecture and Planning will be hosting this conference October 2-4, 1998 in Albuquerque. The conference will provide a unique opportunity for an interdisciplinary assessment of the future of cultural landscape studies, in addition to an evaluation of Jackson's ideas and impact.

The concept of landscape pioneered in the 1950s by Jackson, who died in 1996, encompasses the entire range of environments shaped by human-kind-manicured as well as wilderness parks, high style design, vernacular building types, and roadside neon signs, field systems, town plans, and vacant lot games of tag. Jackson's conceptions of culturally-constructed space continue to echo throughout our society in terms such as townscape, streetscape, and newscape.

The conference has also been structured to provide opportunities for participation in open paper sessions, small group and panel discussions. The organizers encourage the submission of paper proposals on Jackson and his influence, on the applicability of cultural landscape concepts to contemporary design, and on the future of landscape studies, as well as original studies of historic or contemporary cultural landscapes.

An optional field trip will visit some of the first cultural landscapes Jackson explored, including his home village of La Cienega, as well as the kind of exuberant contemporary developments he relished in the Intel-driven company boom town of Rio Rancho.

One-page paper proposals for talks of 15 to 20 minutes should be sent by April 15, 1998 to the address below. Conference organizers Stephen Schreiber and Chris Wilson of UNM, and Paul Groth of the University of California-Berkeley, will serve as the paper selection committee.

For conference information contact Stephen Schreiber, Director of Architecture, School of Architecture and Planning, University of New Mexico, Albuquerque, NM 87131, E-mail: schreib@unm.edu. Phone 505.277.2053. Fax 505.277.0076.

Selling Services Abroad Conference

More American service companies are looking for opportunities in foreign markets. They feel they must expand in order to grow and even to survive in some cases. However, they often lack the knowledge and expertise that they need to be successful. The World Trade Center Denver Educational Services is offering a one-day program, "Selling Services Abroad," which will address many of the critical success factors.

Date: Friday, March 20, 1998
Time: 8:15 a.m. - 4:00 p.m.
Location: Top of the Rockies (formerly The Petroleum Club), 335 17th Street, 37th Floor
Presenters: Mr. Howard Schirmer, Transnational Associates, Inc.; Mr. Timothy McCune, 2MS Inc.
Cost: WTC members $125.00/Non-WTC members $155.00. Includes continental breakfast, lunch, and handout materials.

For more information, call WTC Educational Services at 303.592.5364.
CSNA PROJECT PROFILE

Project: Campus Housing Village, University of Colorado at Colorado Springs. Project Architect: CSNA Architects, with Anderson Mason Dale, PC. Consulting Team: Civitas, Inc. (Site Planning), Kiewa Engineering (Civil), Howard C. Dutzi & Associates, Inc. (Structural), McFall, Konkel & Kimball (Mechanical), Consulting Engineers, Inc. (Electrical), Thomas Ricca Associates (Foodservice Consultant), Thomas & Thomas (Landscape Design). Contractor: Gerald H. Phipps, Inc. Date of Completion: Phase 1, 1996; Phase 2, 1997. Project Size: 170,000 GSF; 600 students.


The Campus Housing Village project at the University of Colorado at Colorado Springs

The Campus Housing Village project at the University of Colorado at Colorado Springs (UCCS) is the first residential project for that campus. It is a two-phase, multiple-building project whose major components include residential living quarters and floor lounges for 600 students, a dining and banquet hall, a living/learning center, which doubles as conference space for summer use, and full administrative support. Residential living areas were designed for various uses such as single occupancy, or double and handicap occupants in a suite. The village concept, with connecting “streets” and “bridges,” was selected to promote a sense of community, place, and for its appropriate scale.

The exterior design reflects the feel of the Cragmoor Sanitorium, an important architectural landmark at the center of the campus. With its towers, fenestration, and use of natural materials, this building offers a pleasant contrast to the larger, more institutional academic buildings constructed in recent years. By drawing from these qualities for the Campus Housing Village, the project—although totaling over 170,000 square feet—projects a more intimate quality of life desirable in a residential project.
The site was carefully master planned to preserve the natural environment and separate the building from the context and high traffic of the highway. Development effectively positions the building near the high point of the property for optimized relationships with natural environment, views, and solitude, and distributes outside fields and parking on the mountain side in a manner convenient to purpose. The exterior physical education, athletic and recreation facilities nestle into terraces within the site slopes and are buffered, where possible, by extended fingers of the surrounding forest.

It was an important factor in the building design to take full advantage of the natural environment to develop an exciting school spirit. An atrium "Main Street Promenade" is the primary coordinating element within the building, connecting the academies grouped at the West end of the building with public spaces around the main lobby. This main street is three stories within the instructional wing and two stories around the media center and lobby. Due to the site's slope, all floors of the building have access at grade. Each academy contains a flexible grouping of eight regular classrooms, two science labs, a technology lab, computer lab, conference/breakout spaces, a teacher office/work room suite, media resource facility, special education, academic storage, and a strong orientation to the focal point atrium space. The commons is the social hub of the school, oriented to marvelous views and natural light. It can be darkened for stage performances and is equipped with sophisticated sound and light systems for drama and musical events. The building is a true "Facilitator of Learning."

The concept of flexibility presided over the entire design of the school. Each academy contains two "four-classroom clusters" with integrated small group/conference "flex spaces." This cluster organization offers unlimited potential for learning options: individual study; small and large groups in almost any combination, fostering opportunities for interdisciplinary learning; as well as traditional arrangements. The commons, gymnasium, and main lobby create a very grand public triad of flexible use opportunities.

Distinguishing Features
A bold, vertical articulation of the building components correspond to the mountain side site, creating an interesting stepped profile. Three instructional academies are clearly expressed and easily understood by visitors. Patterned, split faced masonry walls echo the site's natural coloration, that firmly connects the building to the ground. The total effect is one of strength, compatibility, and durability. Green metal roof forms and canopies integrate with the forest. Massive stone piers anchor main entry pavilions, reminiscent of historic shelters, barns, and houses found in Conifer and the surrounding mountain communities.

Community Value
The high school is a community of learners and a community learning center. The functions arranged around the main lobby encourage the community to use high-profile public spaces without jeopardizing the security of other building areas. Instructional academies are accessed from the exterior and used for evening adult education. The Media Center is a true activity hub of the region, resulting from the partnership formed within the local library district. Red Rocks Community College uses the school as a satellite facility. Other partnerships include sharing athletic facilities with the local recreation district, an on-site resource officer from the Jefferson County Sheriff's Department, and sharing facilities and programs with Evergreen High School (located about 30 miles north). These programs substantially extend the hours of use and exposure of the school to the community.

Jean Seibert Associates
COMMERCIAL INTERIOR DESIGN
A UNIQUE PERSPECTIVE ON PEOPLE & SPACE
MEdical - Office COMPLEX
IN
MEDICAL - OFFICE COMPLEX
EDUCATION - HOSPITALITY
{}
I
took my first drawing lessons when I was five years old, courtesy of TV. There was a program in the 1950s called "Learning to Draw," hosted by John Gnagy. Almost daily, I faithfully placed a piece of clear vinyl over the black and white screen—and then fought with my twin brother over who got to trace the televised drawings with crayons. This cutting-edge combination of technology and hand drawing was a great idea. Forty years later, I'm still working with machines to create drawings, and I'm still having just as much fun. Sometimes I draw for pure pleasure, the way I did when I was five, although most of my drawings these days are done as part of my architecture and urban design practice. I first did serious architectural drawing more than 20 years ago, when I was at Rhode Island School of Design. In an intense design school environment, nobody escapes the need for time management, meeting multiple project deadlines, and producing great work with minimal time and little or no money. It's the same today in any professional design practice, and getting more so all the time. My DRAWING SHORTCUTS attitude and techniques benefit art students, design professionals, and anyone else who needs to be able to communicate creative ideas through effective drawings and graphics in a fast-paced modern world.

The need for DRAWING SHORTCUTS. Over the past decade, there have been incredible advances in computer hardware, software, and other high-tech equipment. Good old-fashioned quickly generated hand drawing, however, has suffered. No computer rendering can communicate the way a real drawing can, and many of us have lost—or never developed—the ability to draw by hand. I've learned that you can have the best of both worlds. You can put technology to work for you, creating accurate computerized perspective backgrounds to use in drawings, using photographs to make bases for illustrations, exploiting the amazing abilities of copiers, and finding the right tools to make your drawing process faster and your drawings more effective. By utilizing technology on your own terms, you can improve your drawing skills and even bring back the magic of drawing in the design process!

Why DRAWING SHORTCUTS are important. Sketching and drawings generated by hand are effective communication tools that allow others to quickly and easily visualize what you design. It is just as important as ever—maybe even more important in this age of computers—to be able to capture creative ideas in the form of confident, believable hand drawings and sketches. But there are often barriers between creative ideas and the drawings that communicate them. The obstacles are most often fear of drawing, over-reliance on technology, lack of training and practice, low self-confidence, and shortage of time. Overcoming these creativity roadblocks can seem like trying to cross a bottomless abyss, but I'll try and explain to you how to make the leap.

In the words of Thomas Edison, "genius is one percent inspiration and ninety-nine percent perspiration." DRAWING SHORTCUTS allows you to manage the necessary ninety-nine so that the vital one isn't lost for lack of trying. The creative artist in you. Everyone is born with the ability to communicate creative ideas with drawings. Some of the best and most effective drawings come from children, before their creative spirit is damaged by the "but I can't draw" attitude that affects so many adults. Children's drawings are simple, lively, quick, and communicate only the basic concept of their vision—in short, the kind of drawings that I've been trying to recreate for years. Simplicity, character, speed, effectiveness, and ease of drawing are what DRAWING SHORTCUTS are all about. Kids can do it, students in my drawing seminars can do it...and so can you!

"Every child is an artist. The problem is how to remain an artist once he grows up." — Pablo Picasso

The Rules Have Changed. The widespread desktop publishing industry has affected every publication, menu, magazine, school report, greeting card, design document, real estate brochure, and cereal box you see. Graphs, charts, color sketches, and illustrations are standard ingredients in almost any presentation. Media methods are used by everyone from elementary school students to corporate giants. The kinds of hand sketching techniques I use in DRAWING SHORTCUTS are geared to the demands—and opportunities—of the modern world.

Client expectations. Trends in design presentations are very different than they were twenty years ago. Clients once paid large sums of money for beautifully crafted perspective drawings of their unbuilt projects. Today, construction schedules are so demanding, budgets so tight, and design changes so frequent that an expensive investment in a detailed perspective drawing too early in the process is usually seen as an affordably risk. Clients are getting smarter, and are relying on quick, inexpensive drawings for the early visioning and promotion of projects.

Compressed schedules. Who has the time for anything anymore? Even television commercials, reflecting our fast-paced times, talk about "buying time." Expectations at home, in school, and in business are more demanding than they were years ago. With all this speedy equipment at our fingertips, we're being asked to produce more in less time. Even the creative process and design communication aren't immune. If we can deliver packages overnight from coast to coast, then why can't we design a building with the same efficiency?

But don't panic—the shortcuts and design tips I've learned and now teach will help you cope. Tighter budgets, thinner wallets. There's never enough money, of course, but lack of money shouldn't be an excuse for not being able to communicate your ideas. Remember, children can tell fabulous stories with just newsprint and poster paint! There are many ways to create drawings that don't require expensive markers, technical pens, or exotic...
materials. Even documenting your work can be economical. A portfolio made up of high-resolution color copies and computer-printed text costs a fraction of what it took to produce color photographs and elaborate typesetting in the 1970s.

Computer skills vs. drawing skills. The average fifteen-year-old spends more time in front of a computer monitor than watching TV. By the time they graduate from college, most architecture students have learned computer skills that rival those of experienced professionals. We have CD ROM, multi-media, worldwide web sites, internet access, 3-D imaging, custom software, ergonomically-designed keyboards, custom screen savers, more power, greater memory, and much, much more. What's wrong with this picture? Nothing! Computers are wonderful tools, and everyone should know how to use them. At the same time, we need to be careful not to lose sight of creativity, imagination, and visual communication skills. Recent college graduates in design fields can't draw as well as they could years ago. Perhaps they simply aren't being taught or allowed to develop their ability to draw! Many people are scared to draw, fearing disastrous results and failure.

"The people I draw look like trolls." "My cars look like shoe boxes." "I'm creative, but I can't draw." "I just don't have the time to learn to draw." "I don't have enough money for expensive drawing secret." "I need to be careful not to lose sight of the drawing." "I'm creative, but I can't draw." "I just don't have the time to learn to draw." "I haven't a clue about how to draw in perspective." "I don't have enough money for expensive drawing materials." Sound familiar? You could probably add a few of your own to this list.

No computer program can replicate the wonderful character of a hand drawn image. Although some new software is closing the gap somewhat. Computer Aided Drafting (CAD) programs allow you to construct perspective views of buildings. Additional software can transform mechanical line work into a series of squiggly lines that give the appearance of a drawing done by hand. But you can also use computer-generated images as templates for hand drawings, complete with character and life. Your communication skills and hand-drawing options are infinitely expanded with computers.

Architects and designers are scared to draw, fearing disastrous results and failure. "I don't have enough money for expensive drawing secret." "I need to be careful not to lose sight of the drawing." "I'm creative, but I can't draw." "I just don't have the time to learn to draw." "I haven't a clue about how to draw in perspective." "I don't have enough money for expensive drawing materials."


**Honor Award Winner:**
David Owen Tryba Architects
Mayer Residence
Denver, Colorado

Program: Empty double lot on a street comprised of primarily single family residences. Private bedrooms and home office. Open entertainment areas. Art gallery for private collection.

Solution: Conceived as an extension of the neighborhood street wall, the program is stretched from property line to property line as it relates to this front wall. The organization is composed in response to site and environmental conditions with respect to existing mature trees, views, and solar orientation.

The front of the house, which faces north, has minimal openings and the roof is steeply pitched to protect from winter heat loss and winds. Located at this side of the house, the two-story gallery takes advantage of the north light, supplemented by reflected southern light from the skylights. The gallery serves as an organizational and gathering area connecting the living spaces, which face south to the backyard. Extensive glazing, protected by four-foot to seven-foot, four-inch overhangs, captures warmth and light, and extends the living and entertaining areas to the outside.

The use of stucco, cedar, and glass in a cubist composition based on the Fibonacci series intertwine the architect's philosophy and the owner's collection and appreciation of art. Of particular interest is the tower, which serves as the owner's office/study. The views afforded from the tower are worthy of a high admission charge. Access to the tower is possible from a four-story elevator that is hidden within a chimney form as seen from the front of the house.

Cottle Graybeal Yaw
Wildcat Ranch
Snowmass, Colorado

Located on a remote 500-acre ranch parcel near Snowmass, Colorado, this residential project captures spectacular views of the Rockies' high peaks and a mountain lake in the valley below. The design was guided by both the owner's

**Merit Award Winners:**
Bercowitz Design
Granite Ridge Residence
Telluride, Colorado

The clients for the Granite Ridge Residence were originally after a "southwest" home, but wanted it to fit in the mountain setting. Our source of inspiration was the Grand Canyon Lodge, a stone structure that burned in 1932. Building forms common to southwestern homes were used, but with stone and log rather than stucco.

Most of the light fixtures in the house were custom designed for the residence in order to be more sympathetic with the style, in both size and style.

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- Architect blended building into context of native stone with pigmented, acid etched, stimulated stone architectural load bearing precast columns and spandrels.
Marketing is on the agenda for the design communication committee for 1998. We have an exciting program filled with hands-on workshops, which include:
- Marketing Materials & Methods,
- Cutting-edge "Hollywood",
- 3-D Modeling,
- The Power of PowerPoint,
- Keeping the Pace with the Competition

The committee will focus on enhancing your product by bridging the gap between the technology of design and the skilled workforce. Whether the image is generated by hand or computer, we want to be the AIA's resource on how to do it better. So keep an eye out for a chance to see a laser model cutter or a tour of Quark Xpress' headquarters, or even a visit to Robert Waxman to learn about state-of-the-art digital cameras.

If you would like to become a member of the Design Communication Committee, please attend our brown bag workshops on the third Thursday of each month at the AIA Colorado offices. Questions? Call Ken Cilla, Assoc. AIA at 303.738.8877 or Jim Leggitt, AIA at 303.575.8515.

COBRA AWARDS, from page 9
philosophic request that "the human occupant be the most important design element of each space" and the requirement to respect the tradition of its western circumstance.

Based on the settlement forms of western ranches, the design concept organizes a "gathering" of simple architectural shapes. Interconnected to form an entry unit, these shapes recreate the scale of a rural compound. To reinforce the feeling of a protected enclave, the house was sited in a topographic saddle between two knolls, which formed a hanging valley on the southern exposed mountain side.

The plan is organized around three primary functional groupings which in turn are expressed as three distinct roof forms: family living quarters, guest quarters, and garage/caretaker's quarters. To create view and "sun pockets" that illuminate the entry court, and to respond to snow protection needs, the roof forms assume the individualized character of rural buildings evolved over time.

DOING BUSINESS IN COLORADO

AIA Colorado is pleased to announce its participation in the Eighth Annual "Doing Business in Colorado" Seminar to be presented by Hall & Evans, L.L.C., in conjunction with AGC and American Consulting Engineers Council of Colorado.

The complimentary seminar will be held on Wednesday, February 25, 1998 from 1-6 PM, at the Holiday Inn S.E., 1-223 and Parker Road, Aurora, Colorado.

Topics will include: avoiding sexual harassment and other employment claims, highlights of recent changes to AIA contract documents A201 and B141, new developments in design-build, and an ADA liability update, as well as other timely business issues.

 Owners, principals, financial officers, directors of human resources, and project managers should plan to attend. Registration materials were mailed by H&E in January.

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Abo•Copeland Architecture, Inc.

Firm Profile

Ever new and then an opportunity knocks and if you spot it in time, you just have to immediately jump on it. Such an opportunity occurred about five years ago at an impromptu reunion of the C.U. College of Architecture, Class of '69. Ron Abo, Jim Copeland, and Steve Loos—all classmates—attended and reactivated some 20-year-old friendships. Abo Architects, P.C. of Denver and James D. Copeland Architects, Inc. of Boulder were successful practices started by Ron and Jim soon after graduation. Steve had just returned to Colorado after some 25 years in practice on the East Coast. One thing led to another, and soon the three classmates were talking about merging their firms to create Abo•Copeland Architecture, Inc. The rest is recent history.

One of the early strengths of the merged firm was the realization of an expanded range of project experience. Ron's firm had worked extensively in urban design, commercial revitalization, historic preservation/renovation, and schools. Jim's firm had become a regional specialist in laboratory/research and design and had extensive housing and commercial experience. Steve's experience in the East was in large projects, particularly corporate office and conference facilities, hotels, and retail. These three were joined by two additional Principals, John Priebe (John graduated from C.U. a year later than the rest) and Danny Cervantes, an experienced architectural technician, to complete the firm's core team. The diversity of interests and experience among this core group has resulted in a very compatible and complementary team. The firm now consists of fourteen people - five licensed architects, six architectural interns, and three administrative staff. This somewhat unorthodox structure works well because of the Principals' commitment to hands-on direction and development of projects. The vision of Abo•Copeland Architecture, Inc. is to be one of the premier architecture firms in the Rocky Mountain Region.

Currently, Abo•Copeland Architecture, Inc. is enjoying a very diverse collection of projects. They are in construction on the second of a three-building renovation effort for the Higher Education and Advanced Technology Center at Lowry. They are about to begin construction of the firm's fifth new building at the National Renewable Energy Laboratory. The firm is working on Denver Urban Renewal Authority and the Mayor's Office of Economic Development projects on urban design and commercial redevelopment projects in LoDo and the Federal/Alameda corridors. These projects, along with various residential, commercial and research and development projects (one in Taiwan), have been keeping Abo Copeland jumping.

Of special note, the firm just received the Sustainable Development Design Honor Award in Jefferson County's Design Excellence Awards Program. Also, Ron Abo is the 1997 recipient of the Martin Luther King Business Social Responsibility Award for his ongoing volunteer work in minority business development. With Ron serving as AIA Colorado President for 1998 and Steve's work as Colorado North Chapter President, Abo•Copeland Architecture, Inc. intends to continue a very active involvement in the AIA. All this along with the recent consolidation of the Denver and Boulder offices into new office space in Denver's Uptown, have served to make 1997 and the prospects for 1998 very exciting.

Abo•Copeland Architecture, Inc. looks forward to 1998 with new energy, enthusiasm, and an enhanced ability to get the job done.
**Project:** Community Medical Center  
**Location:** Lafayette, Colorado  
**Architect:** Hartrong &Associates, PC  
**Program:** 40,000 square foot medical center with urgent care, outpatient surgery suite, and physician’s offices  
**Budget:** $8.0 million  
**Image:** 3D model constructed in AutoCAD, rendered with AccuRender 2.0

*Computer rendering by Erik Hartronft, AIA for the Boulder Public Library. Section through the main reading room and stack area shows the clerestory roof configuration used for daylighting.*

*Image: 3D model constructed in AutoCAD, rendered with AccuRender 2.0*

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**Hiring the best engineer for a project is more than a matter of checking references. You want an engineer who thinks practically, but doesn't waste your time and money. You want an engineer who is responsive, and listens to your concerns. Registration at the state level is but one standard. In Colorado, certified consulting engineers go "beyond registration" to demonstrate their engineering aptitude.**

Certified consulting engineers have unique qualifications, because they voluntarily have submitted to a rigid review of their background, experience and expertise. Certified consulting engineers must be involved in continuing education in their specialty, and agree to a strict standard of ethics.

Certification is appropriate to ask engineers for references and project experience. In Colorado, it's prudent to probe for "special" qualifications as well, and ask, "Are you a certified consulting engineer?"
Several commentators have recently stated that our culture is entering the Third Industrial Age. This is an era in which the major commodity is the development and exchange of knowledge and systems. It is a combination of the computer and sophisticated communication systems that has brought this revolution forth.

New developments have occurred on a daily basis, which makes it almost impossible to keep up with the cutting edge. It becomes even more fascinating when one considers that it took several hundred years for the first Industrial Age to begin in the factories of Europe and then mature into a worldwide phenomenon. This age literally originated, developed, and began to mature in our lifetimes.

What holds all of this together is the computer and a vast network of built and unbuilt lines for communications. These lines stretch from the utility ensembles outside our office to literally the far reaches of space. It is easier to chat with a person in Europe than it is to talk to our neighbors.

The West is not a stranger to this concept of networks for travel and communication. It has always been the goal of entrepreneurs to connect all of this open space with somewhere else.

During the late 1860s the U.S. government paid for the public works project of building a transcontinental railroad line. The industrialists of the time knew it was important to provide the factories of the East with the natural resources found in the West. Also, there were markets in the West that could be supplied with goods produced in the East.

This railroad line followed the route of the early explorers up the Platte River and then across the desert of Southern Wyoming. It joined the line being built from California in the badlands north of the Great Salt Lake. It was designed by H.N. Richardson as a memorial to the Ames Brothers, who were from North Easton, Massachusetts.

The Union Pacific Railroad Company built the Ames Monument at this summit in 1882 for the cost of $65,000. The original rail line passed just to the north of this 65-foot high monument. The monument now stands isolated in the landscape because the rail line has been relocated several miles to the south. It was designed by H.N. Richardson as a memorial to the Ames Brothers, who were from North Easton, Massachusetts.

Oakes and Oliver Ames owned companies in Massachusetts that supplied much of the equipment and all of the shovels that Union Pacific used to build the rail line. Both of them passed away several years before this monument was built. The Ames brothers had been the patrons of Richardson. He had designed several buildings for them in Massachusetts.

A visitor can feel Richardson's energetic use of native materials to build this monumental structure. The granite blocks that were quarried from a nearby outcrop are the size of Volkswagens. In this vast land it is hard to grasp the scale of this monument. It overwhelms you as you stand next to it, but it cannot be seen until you are almost upon it. From a distance it blends into the landscape because the rail line has been relocated several miles to the south.

The highest point of the transcontinental railroad is at Sherman Hill (8,247 feet) west of Cheyenne, Wyoming. It is not an imposing summit, but the constant wind makes you feel like it took twice as long as it should have to reach the top. This is a land of sparsely timbered rolling hills capped with granite monoliths. At one time the lonely town of Sherman was located at the summit.

The opening of this rail line had an immediate impact on the country. A journey that took six months to complete could now be done in days. It served as the main route which all of the other railroads and roads branched off from. This is now one of the busiest railroad lines in the country. Not only was the country connected, but the great land rush to develop the West had begun. We are still experiencing the effects of these land rushes in Colorado.

The West is not a stranger to this concept of networks for travel and communication. It has always been the goal of entrepreneurs to connect all of this open space with somewhere else.
While the computer is an integral part of the information age, the process of creating knowledge is still the domain of individuals, or teams, and involves a deep understanding of the purpose of the work. The financial investment is of course significant, but the real concern is the implications for personal and professional identity. Although the registration deadline was March 19th, call Suzannah Reid, AIA at 303.920.9225, TODAY, if you still want to register. The winners will be announced at the Annual Banquet, tentatively scheduled for April in Aspen.

This year, we've made some changes in the program. The Open Category, which includes Objects, Furniture, and Lighting, was eliminated and will be its own program to be held in the fall. We held the first Objects Competition last September and displayed the entries at the piazza/AIA gallery in Denver. This year, we hope to get a wider variety of submissions, so watch for the postcard and mark your calendars!

We are also adding four new categories to the program this year. The new categories will be: Firm of the Year, Architect of the Year, Contribution to the Built Environment, and the 25 Year Award. These categories will be based on the existing ones that are given at the state level each year. We hope that these new categories will keep us aware of the variety of work that is being done in our chapter.

Both the Design Awards and the four new awards will be announced at the Annual Banquet. We hope to be at the Aspen Meadows again this year on April 18th. You will be receiving your invitations shortly.

If you have any questions, feel free to call Suzannah Reid, AIA at 303.920.9225.

We have spent a lot of time recently thinking about computers. Having gone through graduate school when CAD was in its infancy and worked in primarily small firms who were slow to convert to CAD, I was able to do very well for quite a while without a working knowledge of it. Now, however, it seems I can no longer avoid it.

While the computer is an integral part of my office for almost everything, I have been struggling with the decision to get CAD. It is not the terminology that has me concerned, or the number of choices for programs or platforms. The financial investment is of course significant, but the real concern is the implications for personal and professional identity. Although the registration deadline was March 19th, call Suzannah Reid, AIA at 303.920.9225, TODAY, if you still want to register. The winners will be announced at the Annual Banquet, tentatively scheduled for April in Aspen.

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B141, Owner-Architect Agreement, has been the most widely used design contract for private projects in the United States. New B141 has been redesigned as a three-part modular document, and it is intended to expand architects' services beyond those traditionally included in design contracts.

The revamped format of B141 also is intended to provide more contractual flexibility for owners and architects, while at the same time requiring greater discussion between them on many subjects, which were not historically included in design contracts. It is intended to expand the architects' services beyond those traditionally included in design contracts.

Required to complete B141 should many subjects, which were not addressed in previous contract documents. If a meaningful dialog occurs, then the increased level of interaction required to complete B141 should result in a much better understanding between owner and architect through-out the entire project.

Other noteworthy changes to B141: Deletion of architect's traditional phases of service. The modular format allows owner and architect to designate a traditional package or create a customized scope of services. This change recognizes that not all professional services are provided in a linear fashion; rather many projects proceed on a fast-track basis with design professionals working on more than one phase or different segments of the project at the same time. New provisions also define the circumstances in which changes in services entitle architect to an equitable adjustment in compensation. The concepts of contingent and optional additional services have been deleted.

Modification of plans and specifications to meet owner's project budget. The concept of a construction cost fixed limit has been deleted, but new B141 incorporates the common industry practice which requires architect to modify the plans and specifications as necessary to comply with owner's project budget; provided, architect agrees to owner's budget at the outset of the project and owner's budget is exceeded by the lowest bona fide bid or negotiated proposal obtained for the project.

Waiver of consequential damages. The changes to B141 similarly track the new provisions in A201, resulting in a broad waiver of consequential damages by owner and architect.

Mandatory, nonbinding mediation as a condition precedent to binding arbitration or mechanic's lien litigation. The mediation provisions added to B141 are similar to those contained in new A201, and they preclude the joinder or consolidation of claims by owner against contractor for the mediation process between owner and architect, absent the consent of the parties.

Experienced participants in the construction industry have long recognized the need to tailor the necessary contract documents to fit the unique circumstances of each project. Contract considerations vary greatly from project to project. The AIA set of contract documents provides the benefits associated with decades of use by the construction industry and interpretation by the courts throughout the United States, but they seldom adequately address all the complex issues raised by today's projects. Careful study and comparison of the new contract provisions with prior AIA documents and those published by other recognized industry groups will help establish the much-needed understanding of AIA rules for construction projects.

This article by Mr. Commander first appeared in the Colorado Real Estate Journal.

The new AIA contract forms are now available!

They are looking for a wide range of residential projects, including:

- Energy efficient
- Sustainable design
- Remodeling
- Historic preservation
- Lofts
- Multi-family dwellings
- Custom Housing
- Affordable Housing

The judges for the competition will be from the AIA Denver Housing Committee with an invited guest judge. The jurors will be judging on use of scale, creativity, appearance, innovation, responsiveness to program, balance of design solution and cost, sensitivity to context, and good photos! Entry binders and rules may be obtained from the AIA Colorado at 1520 15th Street, Denver, Ph. 303.446.2206, fax 303.446.0066. Deadline for the submittals is Monday, March 16, 1998 at 5 PM. Don't miss this amazing opportunity!
Calendar Events

FEBRUARY
5 Denver Board meeting, 5:30 PM, AIA offices
10 Architect’s Roundtable, 5:30 PM, AIA offices
13 Government Affairs Committee meeting, 2-5 PM, AIA offices
17 Housing Committee meeting, 7:30 AM, AIA offices
17 North Chapter Board meeting, call AIA for more info at 303.446.2266
18 South Chapter Board meeting, call AIA for more info at 303.446.2266
19 Design Communications Committee meeting, noon, AIA offices
20 Colorado Editorial Board meeting, 11 AM, noon, AIA offices
20 Colorado Finance Committee, 1-2 PM, AIA offices
20 Colorado Board meeting, 2 PM, AIA offices

MARCH
5 Denver Board meeting, 5:30 PM, AIA offices
12 Juvenile Justice System PIA reception, 6:30 PM, Lookout Mountain Detention Facility
12-13 Juvenile Justice System: Change as a Constant, PIA Conference
13 Government Affairs Committee meeting, 2-5 PM, AIA offices
17 North Chapter Board meeting, call AIA for more info at 303.446.2266
18 South Chapter Board meeting, call AIA for more info at 303.446.2266
19 Design Communications Committee meeting, noon, AIA offices
20 Colorado Editorial Board meeting, 11 AM - noon, AIA offices
20 Colorado Finance Committee, 1-2 PM, AIA offices
20 Colorado Board meeting, 2 PM, AIA offices

APRIL
2 Denver Board meeting, 5:30 PM, AIA offices
10 Government Affairs Committee meeting, 2 - 5 PM, AIA offices
15 South Chapter Board meeting, call AIA for more info at 303.446.2266
16 Design Communications Committee meeting, 12 noon, AIA offices

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Subscriptions to the Colorado Architect

The Colorado Architect is provided to members as a member service; subscriptions are available to non-members for $60 per year. Mail or fax the form to AIA Colorado at 1320 15th Street Denver, CO 80202, 303.446.2266, Fax 303.446.2266.

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Computers in Architecture Issue

ARCHITECT OF THE YEAR 1997—
WILLIAM R. DELO, AIA

The first public sector architect to receive the Architect of the Year Award is William R. Deno, AIA. Mr. Deno has played an extremely crucial part in the Boulder campus' reputation for outstanding beauty. For more than 24 years, Bill has been involved with facilities planning and design on the Boulder campus and has directly managed the design of all construction activity since 1984. Stephen Loos, AIA, 1998 AIA Colorado North Chapter President, said Deno was nominated by the North Chapter and selected for "his commitment to excellence in the campus environment." Congratulations!