Working drawings 15% complete

Meeting with owner's administrative and technical staff and own mechanical, electrical and food consultants.

Modify, as required, set to owner for review by his service carriers, local fire marshal.

File sewage system, and kitchen design features, and review with local utilities, transformer vault, electrical services and file (if required) will

Assign checker, assign specification writer, start all final specifications and continue to 50% completion.

Coordination meeting with all consultants.

Continue working drawings to 75% completion, with all consultants.

Final coordination meeting with all consultants.

Assign checker, assign specification writer, start all final specifications and continue to 50% completion.

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Quentin R. Puller
Sandwich waterproofing under stress and movement calls for Sure-Seal Flexible Membranes

Dependable synthetics solve problems of vibration, thermal expansion and stress...

Rapid and widely varying temperature changes in the Rocky Mountain region require special consideration for new design requirements. Many traditional materials cannot provide the flexibility, durability and thermal tolerance that is needed.

Now dozens of recent membrane installations can be cited for comparative study of these applications.

Sure-Seal Butyl Membranes are used for sandwich slab waterproofing, foundation and shower stall applications. They are ideal also for reservoir liners for potable water systems, pollution control and sewage disposal.

Sure-Seal Neoprene Membranes are used for exposed surface areas, expansion joints, flashings and complete roofing systems.

These synthetic rubbers retain high flexibility at extremely low temperatures, are impervious to sunlight and weather, and are unaffected by natural soil chemicals such as salts, acids, etc. They are simple to install and easy to repair.

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Harold Simpson

MASON CONTRACTOR:
Dan Berich

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Since World War II research and development has been pointed toward a family of products which have exceptionally long life, can be applied with good results and at competitive labor costs, yet have flexible characteristics necessary to compensate for movement, vibration, and thermal contraction-expansion factors expected within components of the structure.

Traditional materials do not possess the built-in qualities, such as flexibility at low temperatures, essential to watertight integrity for today's modern designed structures.

The climatic changes of the Rocky Mountain areas accentuate thermal expansion-contraction factors which add to the woes of traditional roofing and waterproofing systems. In fact, sharp changes within a few hours often create movement in slabs and joints seldom encountered by Architects and Engineers from other sections of the country. Several outstanding examples in the area are presently being repaired. These structures are less than ten years old and required the original slabs to be removed and replaced with flexible butyl rubber sandwich membrane waterproofing before relaying of the new slab.

In a building the size and design of the recently completed Gym Complex at Colorado State University, movement in the roof area could cause numerous problems. Anticipating this problem in the design stages, Bunts and Kelsey, Architects, Colorado Springs, specified synthetic rubber membrane for roof flashing around the perimeter of that structure.

Complete waterproofing of the sub-grade storage areas represent one of the major problems confronting an Architect in the design of a structure. Robert A. Hiester, Architect, selected butyl membrane for the sandwich waterproofing under the sidewalk areas of Lincoln Towers, Denver. Bacon & Schramm, Inc., Denver, Contractors.

Five years ago the Martin Company, Denver, had the problem of holding water in their Explosives Metal Forming Pit. After several explosions the existing concrete structure had cracked causing excessive seepage. Several materials were investigated which might correct the situation. Sure-Seal Butyl Membrane, thickness 3/32", was selected due to its aging, elongation, and tensile physicals.

Four years later, based on the performance of the Explosives Metal Forming Pit Liner, the same butyl membrane, thickness 1/16", was used to line the Fire Water Reservoir by the Martin Company.

The addition of underground storage facilities at Norlin Library, Colorado University, Boulder, required positive concrete slab waterproofing. In this application the structural slab or roof over the storage area would be covered with 18 inches of soil fill to accommodate grass and landscaping procedures. The material chosen had to be completely impervious to moisture, it must be compatible with soil acids and resist root penetration. Butyl Membrane was selected to solve each of these critical problems of the structure.

Architects and Engineers today have flexible materials with which to accomplish their unique designs of modern space-age structures. The extreme thermal changes experienced in this area require flexible materials.

Fortunately, these elastomeric materials are priced within most building budgets and contractors achieve excellent end results without on-job complications.

The immense sweeping perimeter of the $3.8 million Auditorium-Gymnasium complex at Colorado State University was flashed and waterproofed with Sure-Seal Butyl Membrane, thickness 1/16". (Bunts and Kelsey, Colorado Springs, Architects; F. R. Orr Construction Company, Contractor).

This potable water reservoir, City of Fountain, Colorado, was less than five years old. Sure-Seal Butyl Membrane thickness 1/16" was directly adhered to the cracked sub-strate. (Western Restoration Company, Denver, Contractor).
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Meet: Our Man In Denver

The title to this article really reads: Meet our man behind the cover—the lay-out—the art—in other words, meet Robert Hesdorfer, Symposia’s Art Director.

One of the most important and difficult niches to fill in a new publication is that of the Art Director—especially if you are looking for an inspirational point of view—a “let’s not look like everybody else” format. We think we “struck it rich” with Bob Hesdorfer; he combines the rare gift of the aesthetic with good business practice. He even has a philosophy about it. Bob believes a publication should present a vital, visual image, endeavoring when possible to avoid the stereotyped, and with a flexible and exciting format.

“But,” says Bob, “You innovate only when it makes sense to innovate.”

Robert Hesdorfer was born on Long Island in New York, and did most of his schooling in the east, principally at the Pratt Art School and Art Career School in New York City. He did further study at the Minneapolis School of Art in Minneapolis.

After his service with the United States Army, Mr. H. spent some seven years with Art Studios in New York City. Then, without a job, but “tired of the Big City,” Bob moved to Minneapolis in 1952. He worked there for a commercial film company, for Minneapolis Honeywell, and in the advertising agency field. Bob almost settled down in Minnesota since he married his wife, Jan, and fathered two daughters. But—not quite! Horace Greeley
had said "Go West," and Minneapolis wasn't quite west enough for the Hedesdorfer. In 1959, they came to Denver. "We arrived," Bob recalls, "On Friday, the thirteenth, and I had a family, but I didn't have a job!" Three days later, he joined the staff of Broyles, Allebaugh and Davis, and although he is far too self-effacing to admit it—Bob's career in the Denver agency field was one of great distinction.

In February, 1964, Robert Hesdorfer opened his own office—an independent Commercial Art Studio at 1818 Gaylord. Last December, he moved to more spacious quarters in Larimer Square. His most recent and interesting contribution to the visual arts has been the art direction of "Metropolitan Denver"—a magazine sponsored by the Junior League and by Forward Metro Denver. We feel his covers and lay-out of the June and July issues of Symposia speak for themselves....

Meet Ted Trainor, Our Man on "The Other Side"

It is most unlikely that you will ever see a picture of Ted Trainor, our Director of Photography, since he always manages to be on the "other side" of the Symposia camera. Ted's paramount objective is to see people through his lens as they are—really are. Note especially his charming and informal photographs of the A.I.A. Awards Dinner (June) and his all-too-candid candid of the Editorial Advisory Board in Action (July).

Mr. Trainor is far more artistically mature than his calendar years. We feel he brings to Symposia a camera with ideas—certainly beyond the straight-forward recording of mere events.

Ted was born in Ski-Country USA—Glenwood Springs to be exact. He moved to Denver, and graduated from North High School in 1951. At nineteen, he was a veteran—completing two years with the United States Air Force. During his time in service, Ted decided on his career—and enrolled at the Brooks Institute of Photography in Santa Barbara, California, graduating in May of 1955. Since his graduation, his experience has been a pot-pourri of photography. He operated his own studio in New Mexico, he did Industrial Photography for the Martin Company for four and a half years, and he did Public Relations photographic work for the Fairmont Hotel in San Francisco. It was in San Francisco that Ted married Josephine O'Connell, a painter and a Denver native. They were married in November of 1953, and returned to the Mile High City in 1955. Since April of that year, Ted Trainor has operated his own studio in the Denver Metropolitan area.

So... in the months to come when you note an especially imaginative bit of photography, you can be sure the man on the other side of the camera will be our Director of Photography—Ted Trainor.

The Editor Talks to Herself

"How do you plan to do this sketch about yourself, Elizabeth?"

"Well... just ask the same old questions, I guess, and get the same dreary answers."

"Since you seem to think that's the only way, as the King said to Alice, 'Begin at the beginning—go on until you come to the end—and then stop!'"

"The beginning—I was born in Denver, and Denver was a wonderful place to be a child in. There was just one drawback, I was a girl. When I was about eight or nine, I was sure the Wicked Witch of the North had cast an evil spell on me, and one fine morning, I'd wake up, and not be a girl anymore. You wouldn't remember, of course, but pleated blue serge gym bloomers were a terrible trial for anybody's aesthetic sense."

"When did you start writing?"

"First grade. I guess, like everybody else, only I wrote all the time, poems and stories and plays and the neighborhood put on in our basement. I was ten, and had my tribute to Charles Lindbergh published in the 'Kiddy Korner' of the Rocky Mountain News. It was called 'The Lone Eagle,' and the meter was pretty bad as I remember. Now, with a little lightning calculation with your slide rule—you can figure how old I am."

"So, you've always been a writer?"

"No. There was music..."

"Oh, you studied music?"

"Not at the beginning. Kids in my day didn't 'study' music—we took it—like measles or the chicken-px. Eventually, however, I got used to being a girl, went to East Denver High School, and studied at the Lamont School of Music. As a matter of fact, my years with Florence Lamont Hinman are very precious to me. I was going to be an opera singer, but I got sidetracked again. There was an audition being held at KOA, and I went along with some people from the Drama Department—just for the ride. And it was quite a ride, in those days, since KOA was on 14th and Krameria right across from a cow pasture."

"A cow pasture at 14th and Krameria? You must be kidding!"

"It was 'country,' they say. Anyway, somebody handed me a script, I read it, and I was in the radio business. This brought me back to writing because in radio, you did everything. You did 'nike' work, writing, production and sweeping out. I did free-lance work most of the time in Denver and Los Angeles, altho' I was on the staff at KOA and KMYR for a time. I did copy work in the advertising agency..."
field, and at one time edited a consumer publication called 'Suburban-ite.'

"You speak in the past-tense."

"Yes, in 1947, I was Woman's Program Director at KLZ, but that was my last 'steady' job. I did do a children's program for a time called 'Magic Island,' but mostly I was a 'Mrs.' and the mother of three daughters. Somehow, I didn't get away from writing even then because I wrote releases and plays for Girls Scouts, and the pageant which was presented at the National Convention of Camp Fire here in Denver."

"You still have those daughters?"

"Well, I do and I don't. My oldest, Alice, is married and lives in Scottsdale, Arizona—the mother of four. The middle 'moppet,' Kathy, was married last September, and she is in Little Rock, Arkansas. The youngest is Fran, a pre-med sophomore at the University of Denver."

"Do you do other things beside 'Symposia'?"

"That's inevitable since I have a home, a yard and family who enjoys eating three times a day. However, I am a member of the Auxiliary at Lutheran Hospital, the Altar Guild at St. James Church, and the secretary of the Mother's Club, Iota Chapter, Sigma Kappa at the University of Denver. I like to cook, sew, knit, garden and fish. I loathe ironing, scrubbing the kitchen floor and polishing the silver."

"And what about 'Symposia'?"

"This is a labor of love, and a tremendous challenge. As a writer and editor, it is a new field, but no one could be more fortunate than I have been. The Editorial Advisory Board not only serves as constant fund of 'know-how' and experience, but they have a spirit of cooperation which is heart-warming. Bob Hesdorfer, the Art Editor, has a sensitivity and graphic ability which is tremendous — Ted Trainor does fine and imaginative camera work, and, of course, my respect for my boss, the publisher, is unequalled. You see, editing a magazine is rather like making a good lemon pie—only it lasts longer. So, as Alice said to the King . . . 'I've come to the end.'"

"Then stop!"

**Note**

Symposia has granted, with regret, a two month leave of absence to Associate Editor Elliot Wager. Mr. Wager is a member of the English faculty at the Colorado School of Mines in Golden. He has asked to be relieved of his editorial responsibilities for the summer months. His heavy teaching schedule will include preparing a group of foreign students for work in the college in the autumn . . . this is a "Crash-Program" instituted to provide non-English speaking students with a workable knowledge of the language before regular classes begin in September. Mr. Wager will return to his Symposia staff position in late August.

Meet—Associate Editor:

**Harry Padgett**

It was something of a temptation not to head this article with the old song title—"We're Just Wild About Harry!" However, with admirable restraint, we began our interview with one question which we felt was most important . . .

"How does it feel, Harry, to have a daughter appear on the General Electric College Bowl on T.V.?"

"Well—to begin with, it's quite an honor to be selected as a member of the College Bowl Panel, and Ruth and I were certainly pleased when Barbara was chosen as part of the Colorado State University Team. Actually," Harry admits with a wide grin, "My chest expansion went up at least three inches. Even at the expense of being tabbed as a 'proud Papa,' I just have to say Barbara is quite a girl!"

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the War Assets Administration. He moved over to the Bureau of Reclamation where he started as an Engineering Reports Writer. In a surprisingly short time, Mr. Padgett was an Editor and Information Specialist. After six years with Reclamation, he was transferred to Colorado Springs with NORAD in the same capacity.

Extremely knowledgeable in the construction and building industries, Harry Padgett has a “down to earth” approach to the practical problems of the business. He is further fortified by an insatiable curiosity for facts and the “what makes it tick” philosophy. He also knows government and government procedure, and this, we feel, will be of real value to the readers of Symposia.

In the past year, Harry has realized a dream—a home built on the rolling contour of a mountain in Conifer, Colorado. He calls it, cheerfully, the “Hermitage”—but he shares his “hermit’s cell” with his talented wife, Ruth, and with a teen-age daughter.

“We keep her on hand,” says Harry, “So we can be active in the P.T.A.”

The other two Padgett daughters are grown now—Nancy, living in Lamar with her husband, two children, and Barbara with her school teacher husband and a youngster in Ouray.

What’s the latest at the Padgett Hermitage?

Well, father and his oldest daughter, Barbara, are writing a college text book—“How to be an Editor.”

One copy . . . please!
Symposia notes with regret the passing of Alice Roeschlaub Williams of Denver at the age of ninety-six. Mrs. Williams was the daughter of one of Colorado's most eminent architects, Robert Roeschlaub, F.A.I.A. Mr. Roeschlaub and two of his fine structures—the Central City Opera House, and "Old East Denver High School" were presented in the June issue in a splendid article authored by Alan Fisher, and with illustrations by Muriel Wolle, Robert Edmond Jones and by architectural drawings by Mr. Roeschlaub himself. It had been our hope to deliver this tribute to Architect Roeschlaub and his work to Mrs. Williams personally. Now—it must stand as a memorial to them both.

The Colorado Pipe Trades Industry Association pledged $5,000 this past month, to help Colorado win the Atomic Energy Commission's proposed $375 million dollar A-Smasher for the state. Lou Thurber, executive director, said the Colorado Pipe Trades Industry Program regularly contributes money for the purpose of industrial development and general betterment of the business climate. "We think it's a good thing," stated Thurber, "and we're willing to put up the money to back it up."

Not only the last word—but certainly the Big Word with Anna and E. B. Jones, Jr. is Christina Diane. Miss Christina made her debut in late May weighing in at six pounds, two ounces. Since the proud Pop is the third generation in the construction firm of A. A. and E. B. Jones, presumably Miss Christina could become a lady Contractor, all in the family tradition. All best wishes and congratulations to Mr. and Mrs. E. B. Jones, Jr.!
Genial Guides on the Central City buses for the A.I.A. National Convention—June 26-July 1—were none other than members of the Rocky Mountain Chapter of the Producer's Council. The P.C. has served the Colorado Chapter of A.I.A. in many ways as they prepared to welcome their 3,000 delegates to Colorful Colorado.

The Aspen Design Conference, June 19-June 25, one of the most significant meetings held during the year, has been covered for "Symposia" by Mr. Richard Crowther, A.I.A. Mr. Crowther is well known throughout the area for his interest and capabilities in interpreting the total design concept. This publication is extremely fortunate in securing his able coverage of this event.

"Nick" Petrie of the N. G. Petrie Construction Company, Denver, has been elected president of the National Western Stock Show for 1967.

The week of June 26th was Architect's Week in Colorado—and Governor Love made it official in a special proclamation.

Alan Gass, AIA, has been recently appointed to the reactivated Art Commission by Denver Mayor, Tom Currigan.

On June 1, the following members of The Construction Specifications Institute officially assumed the responsibilities of the officers and board of directors for the year 1966-67:

President—R. James Noone
1st V.P.—Arthur H. Bush
2nd V.P.—Ernest F. Dillon
Secretary—Donald A. Wakefield
Treasurer—Ralph R. Bacheldor
Editor—John E. Burks III
Advisory Director—John Schaffer

Directors:
Bruce Bicknell
C. H. Johnson
Tom Keeton
Maxwell L. Saul
John McCrum.

Word reached Colorado construction circles in May that one of its members was to receive a signal honor at the national Construction Specifications Institute convention held this year in Boston on May 23-25. Henry B. Baume was one of nine men elected from throughout the United States to fellowship in the Institute. His election as a Fellow by the Jury of Fellows of the Institute was determined by document and based on his activities in CSI and in recognition of his service to the organization. Certainly, further proof of his dynamic leadership was evidenced as the convention elected him for a second term as national president of the Institute. Born in Denver, Mr. Baume went from South High to the University of Colorado where he received his degree in architecture. He spent some fifteen years with Fisher and Fisher (now Fisher and Davia), and recalls with pleasure, many hours spent with senior members of the firm when they would delve into their back files and reminisce about building in early Denver. Mr. Baume is now a partner in the architectural firm of Baume, Polivnick and Hatami.

In his work for the Construction Specifications Institute, Mr. Baume travels extensively, but his home is in Boulder.

He heads a busy household which includes his charming wife, Liz, and three children. The Baume's oldest is daughter, Janet, who will be a senior next year at Colorado State University in Fort Collins. Larry, who is almost eighteen, just graduated from high school and will attend Colorado State College in the autumn. The youngest, Richard, will be a high school junior next year. When we suggested that the Baume menage indeed sounded lively, Henry agreed with a chuckle. "It was at its liveliest when the two boys had a splendid collection of twelve garter snakes—it was a little hard on Liz."

It is with genuine pleasure that we fire our Symposia Salute in July to Henry B. Baume, National President and Fellow of the Construction Specifications Institute.
After completing construction of a small commercial building, the general contractor persuaded the architect to issue a certificate of completion. Relying in part on the contractor's assurances that all bills had been paid and making only a cursory check himself, the architect did issue a certificate of completion. A short time later, an unpaid material supplier filed a lien for $4,000.00. Meanwhile, the general contractor had gone bankrupt and his bonding company was forced to pay these bills. The bonding company then entered claim against the architect, alleging that the architect should not have issued a certificate of completion without making complete verification as to payment of subcontractors and material bills. The bonding company's claim was upheld and the architect was called upon to pay this loss.

MORAL—Before issuing a certificate of completion, require adequate proof that all sub-contractors, labor and materials have been paid. Insist upon receipts and releases in proper form.

Prepared by:
Victor O. Shinnerer and Company, Inc.
Investment Building, Washington, D. C.
Under the auspices of:
The American Institute of Architects Committee on Professional Insurance
Thomas Jefferson's theory of people was that if God put good material into them, Freedom and Liberty would bring it out. At no time did he ever doubt that self-respecting, unbossed people would have enough strength, wisdom and courage to take care of anything that might confront them. He spent his life fighting for Freedom: Freedom from the British Crown; Freedom from Church control of Government; Freedom from landed aristocracy; Freedom from great inequalities of wealth. He felt that there could be but one REAL revolution—the revolution for human Freedom. Jefferson always felt that the program for free competitive enterprise, whether it be in the field of science, journalism, statesmanship or any other—the only program that had any chance of success at all—was one that concerned itself first, last and always with maintaining freedom for the individual citizen. Said Thomas Jefferson, "The Government that governs best is the government that governs least."

More recently, in "My Creed," Dean Alfange has said, "I DO NOT CHOOSE TO BE A COMMON MAN." It is my right to be uncommon—if I can I seek opportunity—not security. I do not wish to be a kept citizen, humbled and dulled by having the state look after me.

I want to take the calculated risk; to dream and to build, to fail and to succeed.

I refuse to barter incentive for a dole. I prefer the challenges of life to the guaranteed existence; the thrill of fulfillment to the stale calm of utopia.

I will not trade freedom for beneficence nor my dignity for a handout. I will never cower before any master nor bend to any threat.

It is my heritage to stand erect, proud and unafraid; to think and act for myself, enjoy the benefit of my creations and to face the world boldly and say, this I have done.

ALL THIS IS WHAT IT MEANS TO BE AN AMERICAN and

ALL THIS IS AS AMERICA SHOULD REMAIN.
"The Houston Construction Co., Pueblo, Colorado, was awarded the $1,207,062 contract for construction of the new Women’s Dormitories, Western State College, Gunnison, Colo. The contract calls for completion of the work in 18 months. Paul Atchison, Denver, was the architect."

By Harry Padgett

the contractor
and
the computer

Just a routine news item, seemingly. However, for H. W. "Bill" Houston, president of the Pueblo firm bearing his name, it marked the first time he had considered using the electronic computer in operating a major contract. The fact that the project was completed in 12 months instead of 18, with a saving of ten to fifteen thousand dollars made it noteworthy.

In common with many businessmen, Bill Houston had been giving considerable thought to the adaptation of the computer to his business. The WSC project was a substantial contract. It would offer the usual problems and perhaps some of its own due to the site and its geographic location. It would be a good place to test the computer's abilities. Having reached this point, the next question was "How can I use it, what do I have to do in order to be able to use it?" "Will it be a tool or a tyrant?"

With Ken McCabe, chief expediter and Al Concialdi, auditor for the company, Houston brought the problem to the Auto-Tronix Co., Inc., of Denver for their first lesson in this new technique. In effect, they had to learn the computer’s "language," to supply information for the computer in a form it could assimilate and analyze and return the completed analysis to them in a form they could understand. The "Critical Path" method was decided upon, with calendar days the criteria of progress. Ralph Lindsey of the Auto-Tronix firm had emphasized that results would be only as good as the information given the computer.

There followed a week-long series of "brain-storming" sessions to prepare the contract information for the computer. In consultation with his office staff, field superintendents, and key people, Houston worked to insure that every item of importance was provided for in the plan. Sub-contractors supplied their time requirements for those portions of the job they would work.

Each portion of the total contract which would affect progress was called an "event," and entered into the plan in its proper place. Almost a footnote is the fact the computer can consider and allow for weather and holidays, variables in its analysis of progress. A Gunnison winter can produce some severe weather to materially affect contract progress.

The end result of the strenuous "think" sessions was a chart which, Houston said, "built the project on paper." It was on graph paper, the vertical lines representing calendar days, the horizontal lines representing the "events" as they should occur in the course of logical, orderly progress. Each event was identified on the chart. Because this project included three buildings, two of them multi-story, three main lines appeared on the chart. Inasmuch as the work was to progress simultaneously, each of the horizontal "critical path" lines started at the same vertical line.

It was at this point that Ken McCabe said, "Be sure to have the shop drawing plans for such things as doors and windows approved. Any delay in deliveries of these materials would disrupt the whole schedule."

The critical paths began with the excavations, went on to the forming up for footings and foundations, then to the pouring of concrete, and so on, the chart allowing for the required number of days.

There are, of course, portions of the job being accomplished simultaneously with other events. These were displayed over or under the main line, branching from it at the start and returning to it upon completion of the particular event. Upon completion of this chart, the three buildings could be viewed in graph form—the progress expanding from basement to first floor, then second and third floors.
Each event identified on the chart with its contract name, was then given a code number for use by the computer to identify the events. Thus the excavating became number 100, forming was 101, pouring followed with 102, etc.

So far this paper work has been accomplished in the contractor's offices. Now the computer people take over and prepare a basic formula which will cover the entire contract, initially and for preparing progress reports as additional information becomes available. In electronic language this is the programming.

By means of punched cards the computer is prepared to receive, remember and consider and analyze the information to be given it, in short, "set up" for the run. This initial set up is retained in card form and used to again set up the machine when progress reports are desired. After the initial programming only about 10 minutes time is required to prepare the machine for processing subsequent reports.

With the machine programmed the data is fed into it and almost "quick as a wink" printed information showing the results of the machine's analysis is produced showing all segments of the work in relation to the whole. This is in the form of a tape, actually a fanfold type of form with columns denoting code number of the entry, time allowed, time consumed, and time remaining. We should note that along with the code number of the entry there is typed the name of the event enabling the reader to know which item it is without having to refer to a master chart.

A feature of this report are items the computer has determined to be of special importance and which are marked with an asterisk. The asterisk indicates an item is falling behind schedule or in danger of lagging behind and would delay overall progress.

Similarly, some events are non-critical or non-critical at this point. These are also evaluated for the contractor, pointing out where and how he can use his labor force most advantageously by delaying work on the cushion if need be and shifting it to a more critical item, also where a critical item is well ahead, he can use the work force to push a lagging item.

Houston obtained progress reports every week by feeding in weekly supervisors' reports during the time construction was in progress. These forecast completion time and where delays might occur and resulted in a file drawer full of the fanfolds, divided by consecutive weeks. It also resulted in "clean-up" time on the job requiring six or seven weeks less than had been allowed.

In discussing the "computerized contract" with Bill Houston, Ken McCabe and Al Concialdi, their optimism concerning the computer and its place in general contracting was obvious. They believe the introduction of new products into the construction field—and perhaps new crafts—together with increasing use of the computer in allied fields will soon indicate the need for greater reliance by the contractor on this electronic tool. This was coupled with the thought that not all projects would be able to justify the use of the computer economically. They had tried it on a couple of smaller jobs, and perhaps because of the small size together with incomplete data for the machine, the results did not warrant the cost.

Houston includes as one of the costs of computer operation, the time his people spend in preparation of the initial data as well as the costs of programming and using the computer by the electronics company.
Buildings are the books that everybody unconsciously reads; and if they are a libel on the laws of architecture, they will surely vitiate in time the taste of those who become familiarized to the deformity.

—Ruskin

The Architect and the Rural Community

By KENNETH C. MAETZOLD, A. I. A.

Architecture is the art and science of building. As a science, it must provide shelter and comfort for human activities in a practical and efficient manner. As an art it must express the spirit, beauty, and aspirations of the people who live, work, play or worship in it. Architecture not only reflects... it determines civilization. Architecture is a rural school or community center of activity, a farm residence or building complex, a small town plaza, shopping center, bank, or an entire town or community development... it is the face of the nation.

The rural community is deserving of the same consideration in its planning and growth as that given to the urban area, and in many cases to an even greater degree. The amount of space the Creator has given us for our use should be intelligently divided and allocated to the appropriate functions for which a community, group, or individual has found need. The arrangement of space within and without the enclosing walls of a structure are deserving of the concentrated planning efforts of the qualified architect. Too often in the rural area the architect is bypassed in favor of promoters who promulgate the picture of lower costs and greater efficiency by proposing the “stock plan” or “package building” approach. Nothing could be farther from the truth.

As an example of design requirements, the rural church program calls for its own individual needs peculiar to that group to be sheltered for worship. The building should be able to satisfy the concept of worship and usage as expressed in the programmed needs of the congregation. This concept is always individual to the congregation being housed, and deserves to be treated individually by the architect to express these needs. A “stock plan” or “package building” cannot house the program nor express the type of worship peculiar to a specific congregation.

PEACE LUTHERAN CHURCH—ARVADA, COLORADO
architect: Maetzold-Lechnick & Hurley
structural engineers: Anderson-Koerwitz & Hawes
mechanical & electrical: Swanson-Rink & Associates
general contractor: Matson & Mulhausen
photographic studies: Hurley.
Any building project involves a justified expenditure for which real value should be received. Beyond the basic essentials of any structure—the concrete and steel, the brick and stone, wood framing, insulation, windows, doors, heating plant, and electrical circuiting—is an equally important, if not more important quality to be achieved—that of a building function, space allocation, appearance, aesthetic feeling, and living atmosphere that must last as long as the materials from which it is built. The achievement of this lasting combination of materials, function, and aesthetics can best be realized by placing the problem in the hands of the architect.

The architect's responsibility requires devotion to competent, ethical and fair service. As the "master builder" he plans buildings and supervises their construction. This involves a lot more than merely making drawings for blueprints.

The architect must study the natural and human environment—the land and the culture for which he designs, including terrain and climate, traditions and tastes of the people he serves. A good building takes account of these local and individual characteristics. The architect must become thoroughly acquainted with the function the building must serve through close collaboration with client, study, and research. He must be a scientist as well as an artist in mastering the complex technical aspects of designing a sound, durable, and mechanically efficient structure. The economic aspects of buildings, zoning ordinances, building codes, materials and building methods, as well as financing, amortization, future maintenance costs, and building income expectancy must be considered and properly analyzed by the architect.

A most important aspect of the architect's work is his art. The architect's creative ability gives his work beauty and distinction while satisfying the needs of those who will use it. It becomes a fresh interpretation of timeless beauty and a symbol of the nation's culture. Even a seemingly insignificant structure will become a greater asset to the owner and the community if given the deserved proper planning of the architect.

The architect is your servant. He is trained as a specialist in building planning and construction. To qualify he must be licensed by the State, involving not only his formal education and apprenticeship, but successful completion of a four-day written examination to demonstrate proficiency in structural design, materials and methods, history, business practice, site planning and architectural design. The responsibility of competent architectural practice requires persons of the highest ethical as well as professional standards. The architect who is a member of the AIA (American Institute of Architects) pledges himself to adhere to the highest standards of professional competency, moral duty and human character.

The architect's services provide planning, technical guidance, advice and counsel, as well as supervised construction. Given in written, vernal or graphic form, these services are rendered so that buildings, with their equipment and surroundings, are soundly constructed and well planned for health, safety, efficient operation and economical maintenance, with beauty and distinction. The fee for architectural services is a small fraction of the total building cost. The architect can often save the owner far more than the fee he pays, due to the fact that complete and detailed drawings and specifications make it possible to obtain tight, competitive bids for construction along with supervision of construction to assure quality work.

The architect is here to serve his community and the individuals in that community. The selection of the qualified architect by any group or individual is the greatest assurance of a building design that will have lasting physical and aesthetic qualities.

The architect who combines in his being the powers of vision, of imagination, of intellect, of sympathy with human need and the power to interpret them in a language vernacular and true—is he who shall create poems in stone.

—Louis H. Sullivan
the GIANT step

In recognition: Of the importance of standardizing building performance practice within a Metropolitan Area.

Case in point: The Denver Metropolitan Building Code

"This," said Joe Antonio placing his hand on top of a thick, heavily-bound, loose-leaf volume, "Represents thousands of hours of volunteer work on the part of many, many people—and, at least a million dollars worth of consultation and advice . . ."

"And," added John Stone, "Around 75,000 bucks of cold, hard cash!"


"There is a difference," Mr. Stone pointed out, "Between a performance code, and one which sets up definite specifications. Our Metro Code leaves the architects and the engineers the job of writing the specifications—it does not, in any way, dictate down to the last nail." Both Antonio and Stone are justifiably proud of the Code. Denver has been cited, by the Wall Street Journal, as one of four cities in the United States as having "one of the best performance codes" in the country. The other metropolitan areas mentioned were Philadelphia, New York City and Houston, Texas.

Formulation of Denver's Metropolitan Building Code really began in February of 1964 when building officials from the five metropolitan counties met together in Westminster. Early meetings brought about a merger of two groups: "The Suburban Building Officials," and the "Denver Building Code Revision Committee"—both organizations becoming a part of the larger entity, "The Metropolitan Building Code Changes Committee." The word "changes" has since been dropped from the title.

On May 13, 1965, the By-Laws of the Metro Building Code Committee were adopted, its broad principles agreed upon, and provisions for voting membership outlined. The purpose of the Committee was simply to develop and from time to time, review and revise a comprehensive uniform Building Code for adoption by the City and County of Denver, cities, towns and counties participating in the Metro Building Code Committee. This was a formidable task since, at that time, only some 22 of the total of 61 sections of the Code had been written.

Voting members of the Committee were designated by the by-laws as the building official appointed by the duly-constituted governing officers of the City and County of Denver; the counties of Adams, Arapahoe, Boulder, and Jefferson; and the cities of Arvada, Aurora, Boulder, Broomfield, Brighton, Commerce City, Edgewater, Englewood, Littleton, Thornton, Cherry Hills Village, and Westminster.

In addition to the single representative and alternate from each county and municipality, other voting members include: two licensed architects, two registered professional engineers, two unlimited or Class A general contractors, a contractor whose principal business is the construction of residences, a representative of the building trades council serving the area of the jurisdiction of the Metro Code, and a member of the fire services from one of the governmental entities comprising the Committee. These members are elected by the full membership for terms of two years commencing on January 1, 1965—except that one of the architects, engineers and general contractors is elected for
a three-year term, and is eligible for re-election for one additional term of office for two years.

There are a number of Advisory Members elected by the membership to the Metropolitan Building Code Committee, and dozens of others who serve as members of sub-committees who work to prepare and improve the various sections of the Code itself.

"Serving on the Committee whether you are a voting member or in an advisory capacity is a measure of a man's interest in his community and in the industry," Chairman John Stone stated.

"There's no cash, and oftentimes very little credit involved," agreed Joe Antonio, "and yet these professional people have given untold hours of time, and their complete devotion to this basic concept of a really comprehensive and uniform code for construction in the Metropolitan Denver area. It's been great!"

Members of the Metropolitan Building Code Committee at this writing include:

**ARVADA:** Eugene Evers, Chief Building Inspector.

**AURORA:** Ken Christensen, Chief Building Inspector.

**COMMERCE CITY:** W. J. Weimer, Chief Building Inspector.

**DENVER:** John E. O'Fallon, P.E., Director, Building Department, City and County of Denver.

**EDGEWATER:** Kenneth Fenwick, Chief Building Inspector.

**ENGLEWOOD:** Beryl Wallace, Chief Building Inspector.


Last—but far from least—Joseph L. Antonio, P.E., Secretary of the MBCC and Research Engineer for the City and County of Denver.

Members of the sub-committees on such categories as "Masonry," "Design Loads," "Structural Steel," "Wood," and "Plastics" read like the "Who's Who" of the Metropolitan Denver building community. Architects, engineers, contractors, labor representatives and industry suppliers—all work together to maintain the Metro Code—to keep it modern and moving—up to the expanding standards of the dynamic Construction Industry.

A Metropolitan Performance Code cannot be a static thing—it must grow and change with new products, new methods, new ideas. So, at the very outset of the Metro Code, provisions have been made to amend and expand each and every section of the Code. The same procedure is used in amending as for the original adoption of a section.

Let us take, for example, Chapter 33 of the Code: Stairs, Exits, Occupant Load.

A Chairman is appointed, lets us say in this case, Charles Sink, Architect. He will be assisted by Ken Christiansen of Aurora; David Austin, Professional Engineer; James Sudler, A.I.A.; James Stone, representative of the Mechanical Engineers; Harold Hawkins, Chief of the Construction Section of the Building Department of the City and County of Denver; James Curran, Mountain States Protection Association; and Myrle Wise, Assistant Chief of the Fire Prevention Bureau. After many meetings and many hours of deliberation, the committee might decide that any structure accommodating 30 people should have two exits and therefor would be considered adequate to empty a given structure in an emergency. There are special cases: Schools for instance, which may require additional egress. The chief concern of this committee is fire-safety—human survival in a fire situation. It may take this committee, or any sub-committee, some months to arrive at what they feel is a reasonable solution to the problem at hand. It is presented, in due time, to the entire membership. It is important to remember, in this regard, each county or municipality has but one vote to register, one way or another. The entire Metropolitan Building Code Committee must accept the ordinance or the changes which have been made. If there is any objection it is reviewed and perhaps referred back to the committee and rewritten before its complete adoption. The Metro Code is revised. Like the "wheels of the gods"—exceedingly slow," because after the Code Committee accepts the ordinance or the revisions, it is submitted by the members to their own municipal councils or county commissions which insures its acceptance and approval on a local level.

Thus far six municipalities in the Metropolitan Denver area have adopted and are operating under the Metro Code. They are Arvada, Aurora, Commerce City, Denver, Edgewater and Englewood.

"There's a reason for this," Chairman Stone began—"Really two reasons, John," said Mr. Antonio. "The first is that a lot of people have the idea that the City and County of Denver is a villain, complete with black mustache, reaching out greedy hands to grab all the outside territory."

"Yes, and they think the reason Denver is backing the Code is so the buildings will be up to standard when the big city swallows them up."

"Right," agreed Antonio. "Actually, there is no such plot on the part of the city in the first place—and in the second place, it is the Code Committee's contention that the counties and municipalities surrounding Denver don't want junk any more than the city does."

"And remember, on the Metro Committee, Denver just has one vote like anybody else. Denver has footed the bills—the mailing, the printing, and so forth. Those expenses have come to that $75,000 I mentioned earlier."

"Yet copies are available at only $7.50 each," added Antonio. John Stone continued, "The plain hard facts are these. The Metropolitan Building Code has become a political football. It's too bad because a good building performance code—and we feel the Metro Code is just that—is desirable for any community."

"It's not a political issue one way or the other. And, it is very simple for any county or municipality to adopt the Code. It is done by reference, and the Code itself is so written that the name of the county or municipality is just substituted," finished Mr. Antonio.

Six municipalities out of the Metropolitan area of 13 counties and municipalities have adopted the Code. They are using it and liking it. The principal supporters of a metro-wide construction criteria are the architects and engineers who design and specify—and the contractors and home builders who do the actual construction. It is a Code they can live with—and one which makes the job they do not only simpler and easier, but better.

In the final analysis, any metropolitan area is only as desirable as a place to live and do business as the structures it contains. These buildings should be sound and they should be safe—we can hope that they will also be beautiful. Certainly there should be certain standards of construction practice. The Metropolitan Building Code provides these standards. When finally adopted, generally, the Code can place the Denver metropolitan area in the forefront of American cities building for a better tomorrow.
NEW OFFICERS FOR PRODUCERS COUNCIL

On June 10, Denver's Producers Council met in the Summit Room of the Diplomat Motor Hotel. First order of business: The report of the Nominating Committee which was comprised of past presidents of the Council. Mr. Hank Bollman, speaking for the committee which included Mr. Carl Edwards and Mr. Don Wakefield, did an unusual and outstanding job of presenting the slate of officers for 1966-67.

The new officers of the Producers Council for the coming year are: R. C. (Sandy) Sandoval, President; Craig Washing, First Vice President; B. A. Wyatt, Second Vice President; Robert Morrison, Secretary, and Roland Proett, Treasurer.

Highlight of the luncheon meeting was the presentation by Thomas W. Keeton, Jr., outgoing President, of a check for $3,200 to the Colorado Chapter of the American Institute of Architects. Mr. Maxwell Saul, President of the Colorado Chapter, accepted for the A.I.A. The check represented the Producers Council's contribution to the "Architectural Guide Book" for the National A.I.A. Convention held in Denver June 26-July 1.

Six thousand of the Guides were printed and 2,500 of them were reserved for the Colorado Chapter to distribute to delegates to the Convention. The rest of the Guides were offered for sale through the Producers Council, and at the time of the June 10th meeting, over 2,000 had been presold. Copies of the Guide were sold prior to the Convention at $1.00 each—during and after the Convention for $1.25. The Guide contains renderings of 256 buildings in Colorado, and the 28 tours which were conducted during the A.I.A. Convention were highlighted by fold-out maps.

Orders your today, Architecture/Colorado, P.O. Box 1619, Denver, Colorado: $1.25 plus 25 cents mailing costs.

After expenses, any profit accrued from the sale of the Architectural Guide Book will go to the joint A.I.A. and Producer's Council Educational Fund. At the present time, the fund is principally used to provide financial aid for students of Architecture. Hopefully, in future, a portion of the fund will be used for research purposes.

Symposia extends sincere congratulations to the new Producers Council officers—"Sandy" Sandoval and his competent crew—and we are anticipating a most productive and interesting year for Producers Council under "Sandy's" leadership.
NOTE: Denver's Henry B. Baume has called this Tenth Annual Convention of the Construction Specifications Institute "the biggest and best yet!" Certainly, Colorado was well represented: C.S.I. members from the state who attended the Convention held May 23-25, at the Statler-Hilton Hotel in Boston, Massachusetts, included: Henry B. Baume, National C.S.I. President; John Schaffer, President of the Denver Chapter, C.S.I.; Don J. Teegarden, Denver Chapter Program Committee Chairman; John Pollack, Bureau of Indian Affairs, Littleton; Ernest Dillon; Arthur H. Bush, Denver C.S.I. Director and Chairman of the Membership Committee; Olin Price, A.I.A.; and Maxwell L. Saul. Mr. Saul is president of the Colorado Chapter of the American Institute of Architects, Chairman of the Building and Industry Relations Committee for the C.S.I. locally, and an out-going Director for Region 10 on the national C.S.I. Board of Directors. Both Mr. Schaffer and Mr. Saul are members of the Symposia Advisory Board. The Convention Report follows:

The Army's Corps of Engineers received a signal honor from the Construction Specifications Institute for its contributions in implementing the CSI FORMAT FOR CONSTRUCTION SPECIFICATIONS into its Corps-wide construction activities.

Text of the citation: "For significant contribution to the basic objectives of the Institute by adopting and implementing the CSI Format for Construction Specifications in its vast program of construction, thereby providing further evidence that Federal agencies and private practitioners can work in harmony toward improvement of construction specifications for the benefit of the Nation, the Institute's Organizational Certificate of Appreciation is awarded to the U.S. Army Corps of Engineers."

Brig. General John C. Dalrymple accepted the Organizational Certificate of Appreciation on behalf of the Army Corps of Engineers. This award is presented annually to firms or organizations who have achieved distinction in advancing the objectives of the Institute.

In addition to the U.S. Army Corps of Engineers, five individuals and twelve CSI Chapters were cited by the Institute's Awards Committee, chaired by Thomas D. Samuel III, of Kansas City, Missouri.

Recipients of Certificates of Appreciation were Raymond E. Cumrine, Sharp & Hendren, Architects, New York; Theodore J. Duke, CSI Technical Director, Washington, D.C.; and Raymond Whalley, Prescott, Whalley & Weit, Los Angeles. Certificates of
which was founded in 1960 and served as a charter member of the Dallas Chapter. A founding member of the Charlotte Chapter of CSI, Atkins has also been a member of the Institute Board of Directors. In the past six years, he has been as institute vice president for three years, and as president for the past two years. He has been chairman of the Credentials Committee, Publications Committee, and the ad hoc study committee of the CSI Technical Program. Atkins was praised for "handling with tact and wisdom the many duties of his office... his accomplishments in upgrading the Construction specifier and forming basic policies regarding CSI publications."

James N. DeSerio, FCSI, Buffalo, New York was so honored for his distinguished achievements in the science of construction. A 1935 civil engineering honor graduate of Northeastern University, DeSerio is a consulting engineer. He is a vice president of CSI, a fellow of the American Society of Civil Engineers, and member of the Engineering Societies of New England.

A Houston architect in individual practice, Ben F. Greenwood, FCSI, was cited for distinguished service to CSI at chapter and institute levels. Greenwood holds a B.A. degree in architecture from Rice University. He is presently Region 9 Director of CSI and chairman of the Institute's Publications Committee. He is also a member of the American Institute of Architects.

Robert W. Harrington, FCSI, San Francisco, is affiliated with the Unit Masonry Association of Northern California and was cited for achievements in the science of construction. A 1940 graduate of Iowa State College, Harrington is active in a number of professional organizations other than CSI, including American Society for Testing and Materials, Society of American Military Engineers, and the Producers Council.

Donald G. Smith, FCSI, a partner in the Miami architecture firm of Smith, Korach & Associates, was honored for his contributions to the Institute's technical program. Smith has served as a Miami Chapter president and a member of the Institute Board of Directors.

The four Industry Members elevated to fellowship were:

LIVINGSTON E. ATKINS, JR., FCSI, heads the Charlotte, N.C., manufacturers representative firm of Woody Atkins Associates. A founding member of the Charlotte Chapter of CSI, Atkins is also active in the Producers Council and the Carolinas Builders Hardware Club.

William P. Dunne, FCSI, Dallas, was a charter member of the Dallas Chap-
ter, has served in several chapter offices and was the first Industry Member elected to the Institute Board of Directors. He is president of the Dunne Co., Inc., in Dallas.

Charles J. Huckleberry, FCSI, a member of the Atlanta Chapter, was cited as an "apostle of the Institute in the South," where he assisted in founding 12 chapters of the Institute. He is presently a member of the CSI Board of Directors. He is a regional manager of Sanymetal Products Co., Decatur, Georgia.

Joseph N. Lucas, FCSI, is a Chicago manufacturer's agent specializing in technical promotion of specialty building products among specification writers, architects and engineers. He has been a member of CSI for 11 years, and has held several Chicago chapter offices, along with that of member of the Institute Board of Directors.

HENRY B. BAUME, Denver, Colorado, was re-elected president of the Construction Specification Institute for 1966-1967. His second term will begin on July 1. Three vice presidents were elected at the annual meeting, they are: Harold E. Keller, FCSI; J. Donald McFarlan, FCSI (a second term as vice-president); and Dempsie B. Morrison, Jr., Architect.

VICE PRESIDENT HAROLD EU-GENE KELLER, a Fellow of CSI, is owner of Building Specifiers Associates in San Gabriel, Calif. He first joined CSI in 1950 and has been active in the Institute for more than 12 years, having held Los Angeles chapter offices of president (1962-64), vice president (1961), chapter board member and advisor to chapter board. He served as chapter membership chairman from 1960 through 1962 and assisted in setting up Specification Digest, a chapter-region magazine. He also served on the committee that helped establish the specification course curriculum at Pasadena City College. Keller is active in several Los Angeles chapter committees on AIA liaison, technical research, special events and CSI regional and national affairs. He has attended three conventions, served on the Jury of Fellows in 1963 and 1964, and has missed only one Region II conference.

VICE PRESIDENT J. DONALD McFARLAN, a Fellow of CSI and presently a vice president, is chief of specifications for Robert and Company in Atlanta and was a charter member of the Atlanta chapter, formed in 1957. He has served as president (1959-60) and vice president (1958-59) of the Atlanta chapter and was an organizer of the first southeastern regional conference in 1960. He has been a speaker at a number of conventions and re-

New Officers and Directors for 1966-1967

New Regional Directors
Regional meetings and is currently chairman of the Institute Technical Program Committee. McFarlan is also a member of AIA, ACI and ASTM.

**Vice President D. M. B. Morrison, Jr.,** is a Memphis, Tenn., architect and has been a member of the Memphis Chapter of CSI since 1960. He was chairman of the Resolutions Committee at the 1963 Convention and is chairman of the Credentials Committee for the 1966 Convention. In the Memphis chapter he has served as president, membership chairman and editor. He has been Region 5 director since 1963. Morrison also is an associate member of AIA, and a corporate member of AIA. He is presently serving a one-year term as director of the Memphis chapter of AIA and was secretary last year.

Elected Treasurer for a two-year term was Charles R. Carroll, Jr., director of architectural services for United States Plywood Corp. in New York City, and a member of the Metropolitan New York and Baltimore chapters of CSI. He is currently Northeast section director, and has served as Eastern section director and secretary of the Baltimore chapter.

**Region 3 Director Arthur E. Hummel,** specification writer for Wolf and Hahn, Architects, Allentown, Pa., has been a member of CSI for 71/2 years, 5 in Philadelphia and the last 21/2 in Allentown. He was the charter president of the Allentown chapter and served two terms in that office; he is presently editor of the chapter newsletter. He is chairman of the committee for three pink sheet studies for Allentown; chapter program committee member; chapter manual editor; chapter convention committee member; was instrumental in setting up a paper called "Bidding Forecast," which is a service to engineers, architects and contractors. Hummel has attended all CSI Conventions since the Atlanta convention; is a member of the CSI By-Laws Committee; headed committee that developed program on pink sheets for Pittsburgh Tri-Regional Conference. He is an associate member of the American Institute of Architects.

**Region 1 Director Robert V. Bishop,** a specification writer with The Rust Engineering Company, Birmingham, Ala., has been a member of CSI for 7 years. He has held chapter offices of president (twice), vice president for programs, and newsletter editor, and has worked on chapter by-laws and technical programs. He performed work with the national Section Tites Task Force 22B. He helped organize the Birmingham chapter; served on the "Heavy Construction" seminar at the 1965 convention; and was chairman of Regions 4 and 5 Bi-Regional Conference. He is a member of the American Institute of Architects.

**Region 7 Director M. Lee Dahlen,** for 7 years a member of the Minneapolis-St. Paul chapter of CSI, is a vice president and chief specification writer with Hummel, Green & Abrahamson, Inc., Architects and Engineers. He has served on chapter by-laws, technical, roofing, education, and arrangements committees. He has been chapter newsletter editor and chairman of the liaison, program, and specification methods committees. He has served on the CSI Convention Program Committee twice, on the Education Committee and on task committees for technical studies. Dahlen has been a Convention speaker and has moderated three Conventions. He served an interim term as director for Region 7. He is an associate member of American Institute of Architects and a member of American Society for Testing and Materials.

**Region 10 Director C. Walter Scott,** a partner in the Salt Lake City firm of Scott & Louie, Architects & Engineers, has been in CSI for three years. He was president of the Salt Lake City (then Bonneville) chapter in 1964-65, and first vice president in 1963-64. He has been on the chapter's board of directors for three years and has served in the additional capacities of program chairman and technical chairman. Scott is an associate member of the American Institute of Architects and belongs to the National Society of Professional Engineers. He succeeds Mr. Maxwell L. Saul, Denver Chapter CSI, who served for three years.

**South-Central Section Director Walter R. Kaye** of Houston is regional manager of Sonneborn Building Products, Inc. He has been a member of CSI for eight years and was a charter member of the Houston chapter. He has served as chapter secretary-treasurer and chairman of its publications and program committees. He served one year as section director and was on the CSI Nominating Committee for two terms. Kaye is a former president of the Houston chapter of Producers' Council.

**Great Lakes Section Director Richard D. Hardy,** architectural representative for Johns Manville in Cleveland, has been a member of CSI for five years. He is second vice president of the chapter and has been on the board of directors since 1963.
MEMORIAL HOSPITAL OF NATRONA COUNTY
CASPER, WYOMING
FISHER & DAVIS ARCHITECTS

General Contractor: Reiman-Wuerth Company
Amount of Contract: In excess of $2,000,000.00
Estimated Completion Date: July, 1967
General Contractor: Pinkard Construction Company
Amount of Contract: $992,000.00
Estimated Completion Date: August 19, 1967

Denver Housing Authority
General Contractor: I. G. Hunt
Amount of Contract: $160,000.00
No completion date has been set
What or How?

By Dr. E. C. McFadden
Director of School Facilities Planning
Jefferson County School District
Colorado

Much has been written regarding owner-architect relationships in terms of working together to produce a desirable end product. The basic philosophy expounded by the proponents of "cooperative endeavor" is predicated on "mutual trust." When appraising practices in terms of philosophy, we find an appreciable gap between these philosophies, tenets and operational procedures. Perhaps the greatest dichotomy exists between practice and philosophy in the widespread use of what some owners call the "guide standards for construction." Most of these guides are written by the owner utilizing some format to cover all phases of construction and specifications concerning materials and equipment. While the Construction Specifications Institute (CSI) has developed a very comprehensive format for construction specifications, use of this guide can produce the same kind of limitations and restrictions as produced by owner-developed guides. Persons who defend owner-produced guides, whether or not they incorporate the recommended CSI format, offer as their main argument a case for controlling quality of construction, finishes and equipment. A question must then be posed. If the owner-architect relationship is to have as its basis a spirit of mutual trust and cooperative endeavor, why initiate every project with the transmittal of voluminous written guides and construction specifications to firmly establish the parameters within which the architect must work?

The particular concerns which occupy the thinking of this writer are those pertaining to the planning and construction of school facilities. In order to fully utilize the talents and creative thinking of the architect in solving the myriad problems encountered in the design of school facilities, the owner cannot logically encumber the architect with administrative dictums (construction guide) which deter the fullest application of the architect's abilities. The use of new construction methods and materials, as well as the increasing availability of new equipment and furnishings is advancing at an unprecedented rate. If the owner inhibits the architect in his investigations, evaluations and subsequent use of new products he cannot hope to realize modern, economical and aesthetically pleasing facilities as the final product of the architect's endeavor.

It is the thesis of this writer that the employment of creative, progressive, architectural firms is the answer to our desire for quality buildings, not a series of volumes directed toward controls imposed upon the architect, in the false belief that they will insure the quality and utility of the building. Many school districts are so intent upon the directive use of construction guides and construction specifications that they fail to realize the basic reason for the construction of a school building—to permit the building to serve as the primary vehicle for the successful expedition of the instructional program. It is for this reason that the most important document to be conveyed to the architect is not a construction guide, but a comprehensive and illustrative set of "educational specifications." The key to
better planning of school buildings is not in dictating standards and specifications or in seeking inexpensive materials, cheap labor and bargain-basement plans and working drawings. A comprehensive set of educational specifications is the foundation of a successful school building design. Basically, educational specifications spell out what the school is going to do so the architect and suppliers can provide the wherewithal to do it. Educational specifications present the needs and aid the experts in supplying the facilities that meet these requirements. Instead of definitive construction guides and construction specifications, definitive educational specifications need to be prepared for the architect. In order to fully utilize the architect's talents and provide him the greatest freedom of expression as an architect, the owner (educator) must convey needs in space requirements, space orientations and space relationships instead of guides and standards which supposedly control quality. Only when the architect is given the liberty to bring his knowledge to bear on the educational requirements, is the combination of the full talents of the educator and architect properly balanced between aesthetic and practical needs. It must be emphasized that the educator needs to provide the educational information available but not at the expense of inhibiting the architect in producing the most intelligent solutions. It must be added that the most urgent need in the design of educational facilities (within the framework of educational specifications) is the provision for flexibility. If we could justify, economically, the construction of schools which after approximately ten years could be completely razed and new structures designed and built, then we might concern ourselves with only immediate instructional needs. Since this kind of construction is, at this time, an improbable expedient, the best we can do is to provide as totally a flexible facility as possible.

It is apparent that an owner's insistence of strict adherence to a rigid set of construction specifications will only serve to restrict any attempts to provide flexible facilities.

If we, as educators, are concerned with the design and construction of school facilities which will provide the proper physical environment for modern instructional programs, we must invest more time in informing the architect of what kind of school facility is needed (educational specifications) instead of telling him how to build the facility (construction guides).
COLORADO ABC
MEMBERS APPOINTED

Five members of the Associated Building Contractors of Colorado, Inc., have been appointed to seven different national committees in the construction industry. The appointments were announced by Alton V. Phillips of Seattle, president of the Associated General Contractors of America, the national trade association for the construction industry, headquartered in Washington, D.C. All of the men appointed are top officials of general building construction firms in Colorado.

B. H. Baker, president of the ABC of Colorado, was named to the Air Force Task Unit, Labor Committee and Legislative Committee. He resides in Colorado Springs, and is the president of B. H. Baker, Inc. Keppel Brierly, past president of the ABC of Colorado, was named to the Membership Development Committee-Building. He lives in Bow Mar, Denver, and is president of the J & K Construction Company.

Donald W. Decker, ABC past president for Colorado, was appointed to the Construction Education Committee. He is the president of Blackinton and Decker, Inc. of Denver.

H. W. Houston was appointed a member of the Apprenticeship and Training Committee. Mr. Houston is featured in this month's issue as the Contractor in the "Contractor and the Computer." He is the president of the H. W. Houston Construction Company of Pueblo.

Gilbert E. Johnson received appointment to the Corps of Engineers Task Unit. He resides in Colorado Springs, and is the vice-president of the Hensel-Phelps Construction Company.

In addition to the committee appointments, Mr. B. H. Baker is also a director of the Associated General Contractors of America, and Mr. Keppel Brierly is a past Director.

Symposia congratulates the Colorado ABC Chapter on the many appointments made by the national organization. It is a real demonstration of the ability of the men who build in Colorado.

LABOR RATES

Associated Building Contractors Conclude Three Year Agreements

A.B.C. Bargaining Committee Chairman, John L. Mason, has announced the final formalizing of all agreements with the six basic building construction crafts in the Denver area. Negotiations for the new labor agreements were time consuming and protracted this year involving a month-long strike by the Carpenter's District Council for Denver and vicinity.


Summary break-down of the settlement follows:

<table>
<thead>
<tr>
<th>CRAFT</th>
<th>COST PACKAGE</th>
<th>NEW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bricklayers</td>
<td>55c</td>
<td>$4.70</td>
</tr>
<tr>
<td>Carpenters</td>
<td>85c</td>
<td>4.56 1/2</td>
</tr>
<tr>
<td>Cement Masons</td>
<td>80c</td>
<td>4.55</td>
</tr>
<tr>
<td>Operating Engineers (Tractor Operator)</td>
<td>80c</td>
<td>3.95</td>
</tr>
<tr>
<td>Iron Workers</td>
<td>80c</td>
<td>4.70</td>
</tr>
<tr>
<td>Laborers</td>
<td>68c</td>
<td>3.20</td>
</tr>
</tbody>
</table>
Hensel Phelps Construction Company of Greeley, Colorado has requested delivery of Pella Wood Windows for the Trinity Episcopal Church of Greeley.

Wood Windows were selected to fulfill a desire by the parishioners for traditional English countryside design. Stone and Wood combine beautifully to reflect this traditional concept.

Pella Wood Windows have not only met the visual criteria desired but they also provide practical solution to the fenestration problem. Low dust and air infiltration provide comfort and reduced cleaning cost. Access to the outside of the window from the inside of the building for cleaning provides tangible savings in maintenance cost over the years.

Congratulations to all those involved for fulfilling the promise, “There is no time for ugliness.”

Trinity Episcopal Church
Fisher and Davis, Architects

---

calling all architects

Gentlemen: Thank you for the renderings which appear in this issue. May we hope for more of the same. As you will note, this monthly pictorial feature assures you that all proper credits will be published.

Our only requirement for publication will be that the rendering must be of a structure on which you have completed a firm contract for construction. The Editorial Staff will need, in addition to the rendering, your name, the name of the owner, and that of the General Contractor. You may telephone the Symposia office at 422-4153, and we will arrange to call for this material at your offices. If you are outside the Metropolitan Denver area, you may address us: SYMPOSIA—Boyce Publications, Inc.—4070 Estes Street—Wheat Ridge, Colorado 80033.
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Dear Fletch:

When one views a new baby who is not a relation, one tends to secretly say to himself, "boy, what an ugly kid."

When one views your new baby, also not a relative, one immediately agrees with its proud parents.

CONGRATULATIONS ON A BEAUTIFUL BIRTH!

Very truly yours,

C. Craig Wahsing
Libbey-Owens-Ford Glass Company

Dear Mr. Trunk:

Several days ago I received Volume 1 of Symposia and read it from cover to cover. The purpose of this letter is to express my appreciation to you for the kind article on Page 15 in regard to my elevation to Fellowship in the American Institute of Architects.

Best wishes for every success in the continuing effort of your new publication.

Sincerely,

F. Lamar Kelsey

Dear Editor:

Your article on the CSI-GDCI joint meeting in the June issue may leave the impression with some that, in my summary, I suggested that dry wall systems specifications may have their own division under the C.S.I. Format. What I said was, "It may be that dry-wall systems may be specified under existing Division 13—Special Construction," which covers on-site construction consisting of items that normally would fall under several other divisions, but which requires the control that can be attained on by including all parts in a single section!

Sincerely,

Maxwell L. Saul, A.I.A.-C.S.I.

(Thank you, Mr. Saul—our MOST important product is ACCURACY.)

Dear Fletch:

Been fixin' to take my pen in hand, etc., but because I'd heard you were "about to . . ." and felt an urge to wish you well and give you my usual, free, unsolicited counsel. Something for you to ignore, like always, and in the finest Trunk tradition of revered friendship.

Fletch, I think the book is an absolute smash. As you may recall, I detest saying anything nice about anybody or anything (jealousy of course), but in this case, must overcome my natural impulse and say: great, bueno, mucho, perfecto, bien, grandessimo . . . I speak a lot of languages, you know. Makeup's so fresh and clean, and readable . . . H. Luce could take a lesson. Hang on to Horst dorfer . . . even though you have to resort to money. Editorial content is provocative, challenging and broadly based, yet skillfully balanced. I'd defy any peruser not to find two or three articles to be of intense interest. Hang on to Betty . . . so pay the alimony.

This rave notice must cease here, because I can't bring myself to say too many things at one sitting . . . I choke up . . . still get those seizures, you know. But I've got many more, if the urge doesn't subside by the time I see you again. I'll face-to-face you with them. Suffice to say, I'm proud of you and wish all the success that I forecast for SYMPOSIA.

One sour note: retoucher on your pix should go into it full time and forget moonlighting plastic surgery and dirty postcards. Find ways to keep your Editorial Advisory Board from nosing into your checkered past, but do it gently and gingerly. Let them overhear bits of conversation like: "... can be replaced," "... Coke machine funds missing," "... and his wife seems like such a nice girl," "... can't believe it—9 martinis before breakfast," etc. Get me telling the Old Master. Rotsa Ruck, Fletch.

Holden Bowler
Bowler associates, inc.

P.S. (in green ink): The green symbolizes my envy . . . yea, fury . . . that I wasn't in on creating SYMPOSIA. That's how impressed I am. If you ever feel the need of brains . . . am waiting . . .

Dear Sir:

Thank you for the copy of Symposia, Volume I, Number 1, June, 1966. I congratulate you for the excellent format of the magazine and the presentation of the material contained therein, especially as it related to the Construction Specifications Institute.

Your truly,

Robert B. McCandless
General Services Administration
Denver Federal Center

Dear Mr. Trunk:

We have received the first edition of "Symposia," which we have found to be most interesting. We would also like you to know that we have received two very prospective inquiries as a result of the advertisement and the Chester All-Aluminum Swimming Pool insert which appeared in this edition.

As previously discussed, we would like to continue the part-page advertisement in next month's issue of "Symposia."

Yours very truly,

Forrest L. Leever
Leever Building Specialties
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or Aluminum
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