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*By virtue of the authority vested by the Constitution
in the Governor of the Commonwealth of Virginia,
there is hereby officially recognized:*

VIRGINIA CONSTRUCTION INDUSTRY WEEK

1977

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OUR PUBLIC AND PRIVATE BUILDINGS OF EVERY KIND ARE THE
HANDIWORK OF AN INDUSTRY BRINGING TOGETHER A WIDE VARIETY
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IN RECOGNITION OF THIS, THE ASSOCIATED GENERAL
CONTRACTORS OF AMERICA, INC. AND ITS AFFILIATES IN THIS
STATE OBSERVE THE PERIOD JANUARY 23 - 29, 1977, AS VIRGINIA
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THE ATTENTION OF OUR PEOPLE.

Wm. E. Anderson

Governor

THE VIRGINIA RECORD MAGAZINE

DECEMBER

1976

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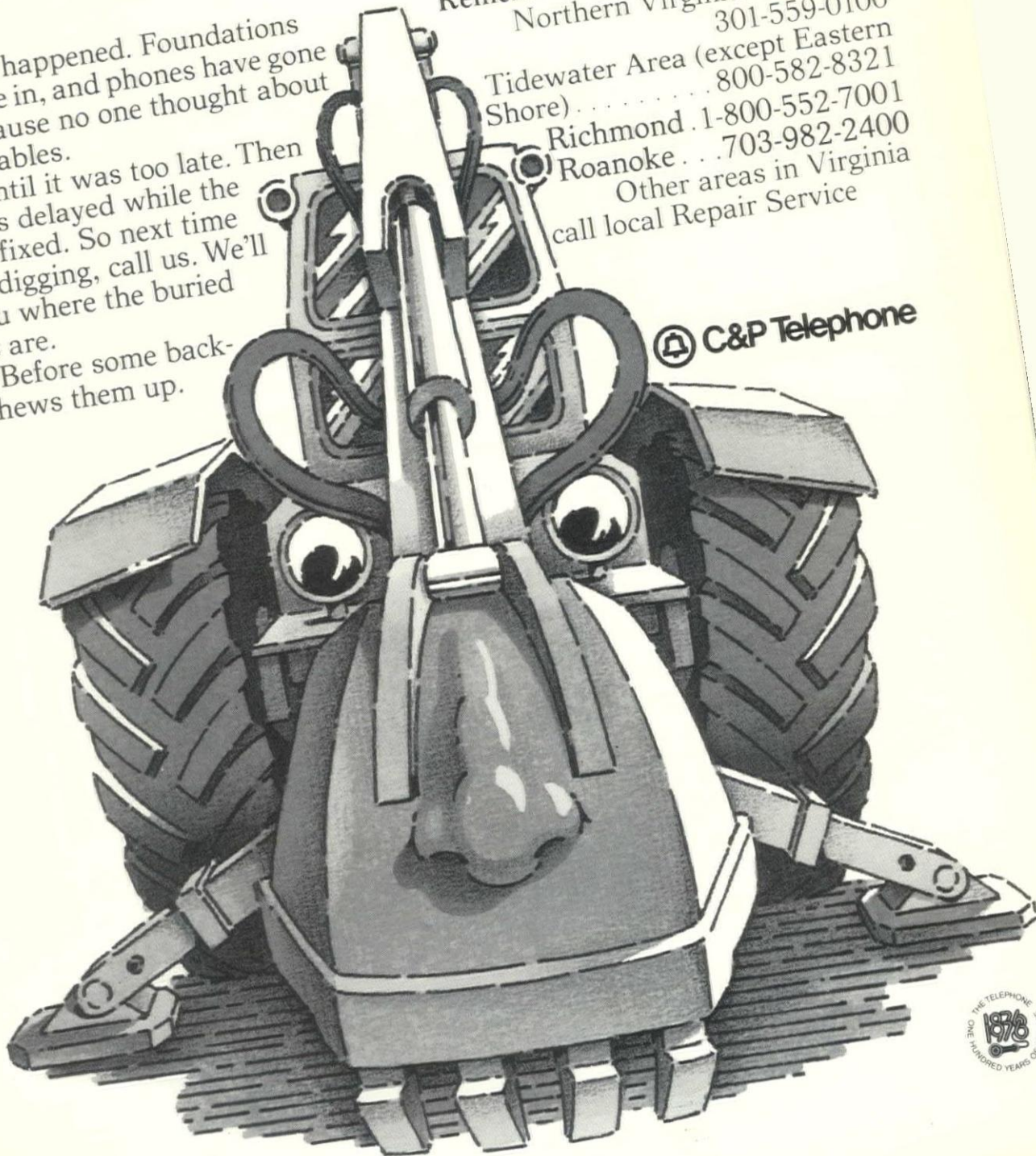
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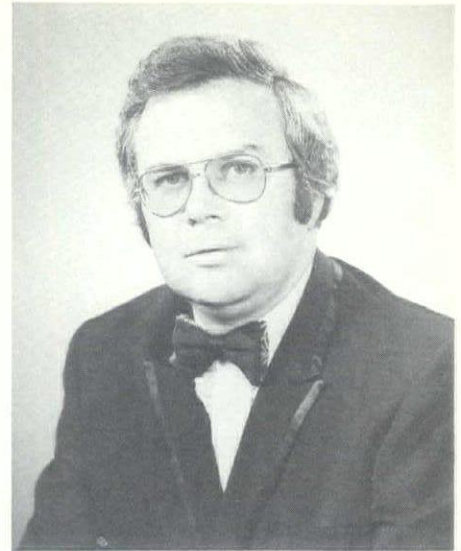
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By

Samuel L. Lionberger, Jr., AIC

An Open Letter to The Citizens of Virginia

Dear Virginians:

1976 HAS INDEED BEEN A most memorable year for those of us who live in the Commonwealth of Virginia. We remember the great heritage that was laid for us by our forefathers and have received encouragement to continue the high ideals which were established.

Virginia's construction industry has remained reasonably strong and viable even through the difficult days of 1975 and 1976. To be sure, our industry has been depressed along with the rest of the Eastern seaboard, however, we have been fortunate that our cutback in construction activity has been less drastic than those in other states.

Why has this been? In my opinion, the better than average construction climate in Virginia has been due largely to the fact that Virginia is one of only twenty states in the Nation which enjoys the privilege of a "Right To Work Law." This law has served to provide an attractive labor market for industries seeking to relocate in this area and has provided us the competitive edge over states which do not have such legislation. It has further tended to strengthen the economic position of the worker within our state for the number of days lost due to work stoppages is significantly less in the Old Dominion, and other "Right To Work" states, than those without the law.

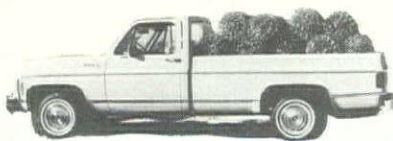
It is most important that we preserve this essential part of Virginia's economy, and preserve the right of each individual to choose whether he wishes to be represented by an organized labor group. Membership in a labor organization should never be a prerequisite to a person's employment. This is a basic American right, in my opinion.

In addition, the Industrial Development Department of the Commonwealth of Virginia, along with similar departments in our state's utilities, railroads, and other major industries have done an outstanding job in promoting the Commonwealth of Virginia. Our State Chamber of Commerce is another effective organization in promoting the growth of our state. Virginia can be proud of the significant accomplishments of these organizations.

The Virginia Branch of the Associated General Contractors of America has represented the interests of Virginia's construction industry well during 1976. I find our state has been blessed with many fine builders of exceptional expertise who uphold the principals of skill, honesty and integrity that symbolize a firm that has been awarded membership in the A.G.C. Only through a unified effort of all builders in the state can we be successful in maintaining a viable, productive, and dynamic construction industry for the Commonwealth.

Virginia must also maintain and expand her road network. It is folly to believe that we are finished with the major road

(Continued on page 38)



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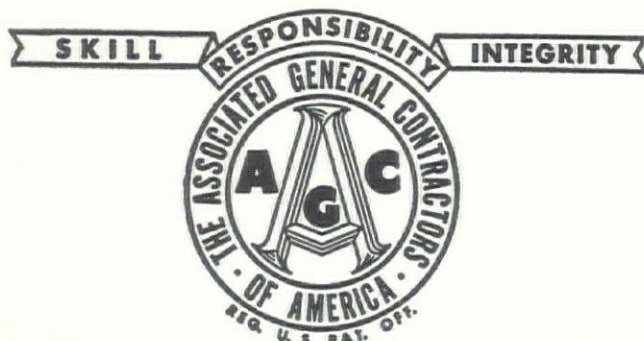
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VIRGINIA BRANCH AGC MANAGEMENT CONFERENCE ACAPULCO, MEXICO Oct. 21-26, 1976



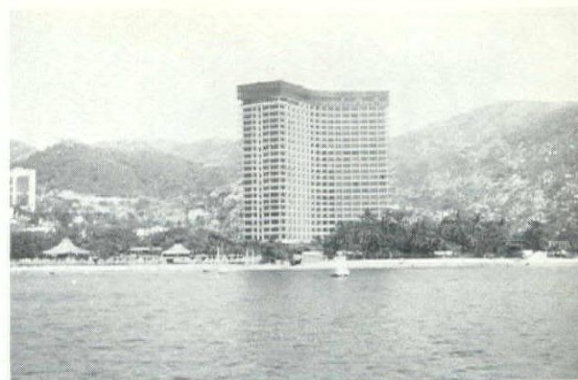
Mr. & Mrs. Walter Conrad, Sr. (Conrad Brothers, Inc., Chesapeake).



Bill Eubank (P.E. Eubank Co., Richmond), and Charles Curly (Kjellstrom and Lee, Inc., Richmond).



Va. Branch President & Mrs. S.L. Lionberger, Jr. with Mr. & Mrs. Edward Riley (Chas. Lunsford & Sons, Roanoke).

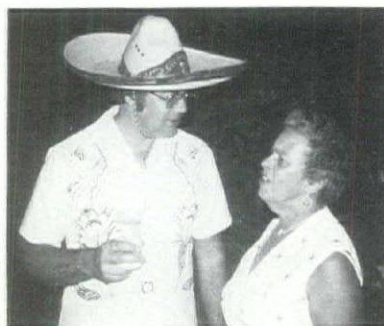


Hyatt Regency - Acapulco. Headquarters Hotel for Virginia Branch Management Conference.

ON OCTOBER 21, 133 members of the Virginia Branch AGC left Byrd Airport for the Acapulco adventure. After a most pleasant and enjoyable flight we landed at Acapulco, Mexico and were taken by bus to the Hyatt Regency



President Lionberger and Mr. & Mrs. Jack Houck (John R. Houck Co., Richmond).



President Sam Lionberger greets Miss Margaret Ciucci of the Virginia Branch AGC Staff.



Robert Geary (Ocean Electric Co., Norfolk), Joe Brown (Beach Building Corp., Va. Beach), Mrs. Glover, Mr. Glover and Mrs. Geary enjoyed reception.

Hotel. This hotel had a commanding view of Acapulco Bay and surrounding sites.

The members enjoyed varied activities. 21 Sailfish were caught and many smaller catches were made. There was a one day tour to Mexico City which many participated in and enjoyed. The first morning after our arrival, members were taken by bus on a tour of Acapulco where stops were made for picture taking and for shopping at the Silver Shop, one of the better shopping centers in Acapulco. On the return trip to the hotel a stop was made for the members to see the Indian High divers soar off the Quebrada Cliffs into the Surf. A poolside cocktail party and reception was hosted that evening by the hotel for the Virginia Branch members and their wives.

The following day featured a three-hour cruise on the Yacht Bonanza where a combo band was provided and swimming was available in the Yacht's pools. A forty minute stop was made to allow those who desired to do so, to swim in the ocean. A night club tour was made that evening including dinner at an outdoor restaurant, a visit to a famous discotheque and, to round out the evening, the group had an opportunity to enjoy the Flamenco Dancers at an outstanding night club. On Sunday afternoon some of our members enjoyed watching the Bullfights while others took the opportunity to do more shopping and further sightseeing. However, the most fun for our members was shopping — silver, gold and other jewelry offered many bargains. On the return trip to the airport an extra bus was needed to carry the many purchases made by the Virginia Branch members. All in all, it was a most enjoyable trip.

Program Highlights

BUSINESS SESSIONS

Friday, October 22
10:00 A.M.

Business Session I — FILM FESTIVAL

"To Build a Future" — A sound film illustrating how a young man can enter the construction industry and the advantages.

"Uncle Sam - The New 'Safety Engineer' in Your Area" — A slide presentation with sound, on the new Federal Safety Laws.

"The World of Construction" — An Industrial Arts Curriculum to introduce construction at the junior school level. Presented and narrated by James F. Duckhardt, Executive Director, Virginia Branch AGC.

Saturday, October 23
9:00 A.M.

Business Session II — PROBLEM-SOLUTION FAIR

Moderators:

W.M. Reynolds (William E. Reynolds Construction Co.)

W.O. Jones (Kjellstrom and Lee, Inc.)

Curtis Rosenbaum (Roanoke Engineering Sales Co., Inc.)

10:00 A.M.

Business Session III — IDEA FAIR

An exchange of money-making ideas.

Moderators:

Q.M. Tomlinson (Q.M. Tomlinson, Inc.)

W.S. Heindl (Heindl & Evans, Inc.)

A. Bertozzi (A. Bertozzi, Inc.)

Sunday, October 24
9:00 A.M.

Business Session IV — BONDING & INSURANCE

A Round Table discussion of bonding and insurance problems

Speaker: Robert T. Schaller (Brown-Arris-Langhorne, Inc.)

10:30 A.M.

Business Session V — "PENSION PROGRAM FOR A SMALL BUSINESS"

Speaker: Edward Riley (Charles Lunsford Sons)

Monday, October 25
9:00 A.M.

Business Session VI — STEEL VS. CONCRETE IN CONSTRUCTION

A discussion as to the advantages and uses of both materials.

Panel: Jack Houck (John R. Houck)

Steve Marshall (Danville Concrete Prod.)

Dave Reed (John W. Hancock, Jr., Inc.)

Julius E. Ellen (Dee Shoring Co., Inc.)

10:30 A.M.

Business Session VII — IMPROVING CONSTRUCTION-SUBCONTRACTOR RELATIONS

Chairman: James Parrish (Taylor & Parrish, Inc.)

Panel: Robert Geary (Ocean Electric Corp.)

James Feeney (James Feeney Co., Inc.)

Parker Snead, Jr. (J.E. Jamerson & Sons, Inc.)

J.C. Brown, Sr. (Beach Building Corp.)



President and Mrs. Lionberger with Steve Catlett (Southern Brick Contractors, Inc., Richmond).



View of the Hors d'oeuvres table at reception featuring a seahorse carved from butter.



Nickie Duckhardt, wife of Executive Director Jim Duckhardt, tries her hand at Parachute flying. This sport of being pulled by a speed boat while hanging to a parachute was enjoyed by many of the Virginia Branch Members and their wives.

BOARD MEETS IN WILLIAMSBURG

THE BOARD OF DIRECTORS of the Virginia Branch AGC held their Fall meeting November 9 and 10th at Fort McGruder Inn, Williamsburg, Virginia. Also in attendance at this meeting were District Presidents and Committee Chairmen.

Beautiful weather greeted the AGC leaders as they met in this historic site. The facilities of the Fort McGruder Inn aided in making this one of the more successful meetings ever for the Virginia Branch. However, the most positive force contributing to the success of the meeting was Virginia Branch President, Sam Lionberger. With his usual enthusiasm he presided at the meeting with competence, maturity and experience beyond his years. All members in attendance were affected by his optimism and confidence for the future of the Association and the Construction Industry.

In addition to tending to normal administrative duties, the Board approved an operating budget for 1977 and a membership report for 1976 which indicated a gain of 29 new members for the year.



President Lionberger in a discussion with Lester L. Hudgins (Hudgins Construction Co., Newport News), President of the Peninsula District.



Charles Pietsch (Manson & Utley, Charlottesville), Associate Director of the Virginia Branch, and Mr. & Mrs. R.C. Lane (also of Manson & Utley) engage in friendly conversation.

The Revenue Sharing Plan was discussed as a membership incentive. It was felt by most Board members and District Presidents in attendance that this was a very effective method. There was a recommendation for a Policy Manual change to institute such a program on a permanent basis. This matter was referred to the Executive Committee for future consideration and will be acted on at the January Board meeting. In the meantime, the Board extended the present Revenue Sharing Plan past the January 1 operating date until a new Plan is developed. This would return to each District Treasury \$100 for each new Regular member and \$50.00 for each Associate member.

A new By-Laws amendment was approved by the Board and will be recommended to the membership at the January meeting. This would allow active past presidents of the Virginia Branch AGC to serve on the Board of Directors. To remain active a past president must be employed by a member firm and maintain a minimum attendance at board meetings. It was felt by the board that the leadership ability and experience of our past presidents was being lost to this Association. These men because of their service to the Association are in a position to offer much needed counsel and advice.

There was also a report on a Worker's Compensation study. This is being investigated as a potential service to the members on a group basis. The matter was referred to the Executive Committee.

The name of our Municipal Utility Division was changed to the **UTILITY DIVISION** which more closely designates the type of members. In addition, there were discussions on a Bid Plan for the State of Virginia, Cost of conforming with OSHA and Engineers proposed Licensing Law.

Committee Reports included the 1977 AGC Legislative Platform as recommended by our Legislative Committee and



Rindy Lionberger, wife of State President S.L. Lionberger Jr., Mrs. Rena Kidd, wife of Burton C. Kidd, AGC Regional Director, Tidewater District, and Mrs. Gina Poindexter, wife of Va. Branch President-elect John E. Poindexter (Basic Construction Co., Newport News), having some conversation with their coffee.

approved by the Board. There was a report on our 1977 Management Conference with the tentative designation, Vienna. Also there were reports from the following Committees: Convention, Business Management, AIA-AGC-CEC-VSPE Joint Cooperative Committee, Public Relations, Davis-Bacon, Environmental Control Committee plus reports from most of our Districts.

Board of Directors meetings were held on the afternoon of Tuesday, November 9th and on Wednesday morning, November 10th. On the evening of November 9th, the Board and other AGC leaders met jointly with the Peninsula District. Over 60 people enjoyed the fellowship of a reception and dinner. The meeting was presided over by Chris Phillips, (Benson-Phillips Co., Inc., Newport News), Vice President of the Peninsula District, who introduced the AGC officers to the Peninsula District Members. The speaker for the evening, Honorable Earl Shiflett, was introduced most capably by Rindy Lionberger, wife of President Sam. Mr. Shiflett serves as Secretary of Commerce and Industry for the State of Virginia and spoke to the members on Free Enterprise and his philosophies of government. Mr. Shiflett is an outstanding speaker and brought a message to the members which was extremely timely and important. His remarks were well received and almost everyone in the room approached Mr. Shiflett to congratulate him following his talk.

The officers, directors, district presidents and committee chairmen who attended this meeting are to be congratulated for taking time from their business to support the AGC. Through the leadership of these and others like them, the Virginia Branch AGC has grown and has become a dominant force and spokesman for the Construction Industry in the State of Virginia.

The next meeting of the Board of Directors will be held in conjunction with the annual convention on January 23-25, 1977 at the Homestead, Hot Springs, Va.



Honorable Earl Shiflett, Secretary of Commerce and Resources, Commonwealth of Virginia, spoke to the Virginia Branch Board of Directors and the Peninsula District Members at the Peninsula District Meeting, held in conjunction with the Virginia Branch's Fall Board Meeting. Here he discusses his talk with Samuel H. Shrum, Honorary Member of the Virginia Branch and past state president; Samuel L. Lionberger, Jr. (S. Lewis Lionberger Co., Roanoke), current state president; and James F. Duckhardt, Executive Director.



Sid Galloway, Honorary Member of the Virginia Branch AGC, with Dave Reed, Jr. (John W. Hancock Jr., Inc., Salem), Chairman of the Associate Division on Board of Directors.



Board of Directors member Ned Brown (John W. Daniel & Co., Danville) with Mr. & Mrs. Arnold Prillaman (Prillaman & Pace, Inc., Martinsville) and Walter Caldwell (John W. Daniel & Co., Danville), Southside District President, enjoying themselves at the reception. Mr. Prillaman is also a Board member.



William G. Bryson (Tidewater Construction Corp., Norfolk), a member of the Va. Branch Board of Directors, and R.F. Moss (Moss Associates, Harrisonburg), President of the Valley District, in a friendly chat.



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CONSTRUCTION BY PUBLIC EMPLOYEES: GOOD OR BAD?

*Prepared by Virginia Branch, Associated
General Contractors of America*

MUNICIPAL Administrators are busy and frequently unjustly criticized people. Every citizen believes it is his right to criticize Government officials and complain about high taxes caused in part by the ever-increasing demand for services. Many administrators feel trapped in this web and believe that there is no way to provide the services demanded and remain within budget limitations.

The method selected to construct public buildings and facilities offers an opportunity for municipal officials to more effectively meet the public demand for services, reduced costs, save administrators time, and increase the efficiency of Government.

Since the days of the founding of the Republic, the concept of market competition has been recognized as the most efficient and economical method of doing business. Yet many municipalities make business decisions to construct buildings and facilities without the benefits of the market place. This occurs whenever a municipality engages in construction which could be provided by private enterprise. The construction of buildings and facilities by municipalities is frequently known as "Force Account," and refers to public works construction done by a governmental body using public employees and equipment owned or rented by that body. Another, less frequently heard, term for the same thing is "Day Labor."

The advantages for municipal officials and the public in general to construct public works by the contract method rather than by public employees are many. The following are examples of the ways the taxpayer benefits from the contract method.

a. Throughout the State of Virginia there are competent, responsible contractors available and ready to bid on all types of public works construction. They remain in business because they have the experience, modern equipment, and efficient construction techniques required to

be competitive in the free enterprise environment. The public has the right to expect municipal officials to capitalize on these contractors' experience and the free market forces when making decisions involving the expenditure of public funds, for construction projects.

b. The quality of the work accomplished under contract is guaranteed by a bond which provides that the job will be completed according to detailed plans and specifications. Materials required and results to be achieved are specified. More importantly, workmanship at every step is inspected by representatives of the public using approved standards. When public employees do the work, the official responsible for the construction is also the public's inspector. It is against human nature for a person to criticize himself to his superiors. So, under this method, how can the public ever be certain they received quality workmanship and materials for the tax dollars expended? Needless to say self-inspection also provides an unusual opportunity for corruption.

c. Under a contract, the contractor, architect or engineer, and the municipality agree on a completion date prior to initiation of the project. A bond is posted by the contractor, and he cannot receive final payment until it is completed. Failure to complete on time often causes severe financial penalties to be imposed. When municipalities do the job with their employees, there is no incentive to complete it without interruption and, as a result, the public frequently suffers the inconvenience and sometimes additional expense caused by delays, often without any recourse. How many times have streets torn up for sewer projects run days at a time with little or no work in progress because the municipal crews involved have been moved to other jobs?

d. A significant advantage of the contract method for constructing public works is that all the costs are known before the project begins. The contractor posts a bond, guaranteeing completion, in accordance with the plans and specifications, for the bid price. If he underestimates his costs, the loss is his, not the public's. It is

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often impossible for senior municipal officials as well as the public, to know the true cost of in-house projects. Have detailed cost breakout of in-house projects ever been made available to the public? Frequently, the municipal engineer does not even develop detailed plans and specifications; so, there is no sound basis to calculate true costs. In addition, without detailed plans and specifications, how can the responsible official know the completed project will accomplish the purpose intended, that it is safe or that it has not been over-designed and wasted both labor and materials?

In view of the above, why is it that municipalities continue to use, and in some cases, expand work done by public employees? The following will provide some insight into the most commonly cited reasons.

Historically, municipalities have maintained a certain quantity of construction equipment and construction personnel to meet emergency requirements and to perform small routine maintenance. In sparsely populated areas where there are no local contractors, it is quite possible the municipality has no other recourse. In the current construction market, municipal officials might be surprised to find that some contractors would bid

on this type work today. To get around the problem of emergency repairs, unforecasted work and routine maintenance which is often done by public employees, some municipalities have open contracts, awarded by competitive bid, for "X" amount of paving, sewer lines, etc., to be constructed by a contractor on call of the municipality during a specified period. The City of Lynchburg, Virginia, for example, has been doing this for about 15 years. The value of their contracts for 1976 is well over three-fourths of a million dollars. It has proved to be a successful arrangement for local officials. An often repeated justification for in-house work is that the crews were not busy and, therefore, as a practical matter, the municipalities needed to put them to work. In times of increasing tax burdens, how many municipal administrations believe they could make a creditable defense of such a position in a public meeting of taxpayers? Many municipal officials honestly believe that employing their crews offers greater economies than contract construction. This concept is not supported by detailed analyses which have been made on the subject. In November 1975, the New York City Citizen's Budget Commission released a study of four test city contracts which revealed that 45% more work could be accomplished by contract than could be done by in-house forces with the same number of tax dollars. The Civil Engineer Engineering Department of Oregon State University published in January 1976, a study entitled *The Economic Impact On The Taxpayer Resulting From Force Account Construction*. The study was headed by Professor E. Phelps, P.E. and was illustrated to show the tax dollar cycle under both methods. The savings to the taxpayer were obvious. The example was based on an actual project in Oregon and, while the percentages may be different in Virginia, the principle involved is valid.

On occasion, municipal officials using personnel provided by Federally Funded Public Employee Programs, cite "Free Labor" and equipment purchased or rented, with revenue sharing funds as reasons why they can do the work cheaper than by contract. Payroll and equipment partially or totally fun-



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ded by the Federal Government does not assure quality control or cost effectiveness at the local level. The Federal Funds come from Federal taxes imposed on local citizens so the money comes from the same pockets. The "Free Labor" is frequently unskilled and therefore, its ability to do anything other than crude construction is highly suspect.

When municipal officials argue that use of public employees is cheaper than by contract, it is a clear indication there is a high probability all true costs are not being considered. In a recent survey of Virginia Municipal Officials, it was revealed that many construction costs such as equipment depreciation and maintenance, additional supervision, and losses to the tax base are not considered in determining the public's cost. Some municipal officials believe, for example, almost any work crew can put a sewer pipe in the ground, and all that is required is a few laborers and a backhoe. While it is possible to lay a pipe under such conditions, it is highly improbable the job will be done economically and the resulting pipe permit flow at maximum rate. A report by some Virginia contractors, engaged in pipeline construction, reveals that a typical pipe crew laying 12-15 inch pipe at a six-foot depth requires equipment valued at well over \$100,000.00. The daily operating cost, including fuel, maintenance, and depreciation would be close to \$500.00. Using this equipment, an experienced pipe crew could lay between 150 and 200 feet per day. The bid price (less pipe) for such a project would run between \$9.00 and \$10.00 per foot which includes all costs such as equipment, direct labor, indirect labor, insurance, bonds, profit, and taxes. It is highly improbable that municipal crews could do the work as efficiently at a lower price and still comply with all appropriate OSHA Regulations.

Municipal officials often justify in-house construction to their constituents by making the simple statement that it is cheaper than contract. It is impossible to subject such statements to a valid test since without the benefit of competitive bids, in which prices often vary widely, there is no way of knowing the price for which a contractor would

do the work. There are many instances where competitive bid has been employed that the bid price is below the carefully developed consulting engineer's estimated cost.

The use of in-house construction is in conflict with the statement of philosophy published by the Office of Commerce and Resources, Commonwealth of Virginia, which says in part — "Every effort will be made to encourage the private sector to meet the demands of society to the fullest extent possible ..." The greater the per-

centage gainfully employed in the private sector the less will be the number that must be of concern to Government.

The contract method of construction is the means whereby the Municipal Administrator can provide the public with better structures and utilities in less time and at reduced costs. The next time a municipality claims they can do a construction job cheaper with in-house personnel, they should be called upon to prove it with a detailed cost analysis not a guess.

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HIGHLIGHTS/NATIONAL MID-YEAR BOARD MEETING

1976 was the most successful Mid-Year Board Meeting ever experienced by our National organization. Highlights of that meeting include:

** Working closely with the Federal Bureau of Investigation to crack down on the growing number of construction equipment thefts, now estimated at more than \$100 million a year.

** AGC and the American Institute of Architects have reached agreement on the 1976 edition of A-201, the General Conditions of the Contract for Construction.

** The Federal Energy Administration's proposed standby gasoline and diesel fuel rationing plans have been modified at the request of AGC to provide for the allocation of fuel on a project basis to the construction industry.

** AGC President Hogan and members of the AGC Executive Committee met at national AGC headquarters with Administration leaders including Secretary of Labor W.I. Usery and Secretary of Commerce Elliot L. Richardson and several of their key assistants to discuss a wide range of subjects of interest to the industry.

** AGC has launched a renewed attack against the Building Trades' practice of restricting the use of fabricated products in order to save work for union members.

** Another National Open Shop Conference was conducted because of the increasing demand of the members for information pertaining to open shop operations.

** A record number of other conferences, seminars, and workshops were held in the past six months covering such areas of construction as equal employment opportunity, HUD's housing assistance payments program, safety, airport design and construction, manpower training, as well as the highly successful management conferences on such subjects as the Closely Held Business, Contracts and Claims, Marketing, and the Mini-College.

** Working on two Davis-Bacon problems in recent months: the Wage Appeals Board, and the requirement that general contractors pay working subcontractors the Davis-Bacon rate and overtime, and record them on the payroll. Both matters have been resolved favorably.

** AGC efforts to gain less onerous "good faith effort" requirements and to correct problems caused by incomplete or faulty EEO bid conditions submissions were successful.

** National membership offered to chapter associate and affiliate members.

** Construction work in Saudi Arabia now requires bid guarantees of 1 percent (down from 2 percent) and performance guarantees of 5 percent (down from 10 percent), result of a joint AGC/government task force.

** New AGC publications developed over the past six months are "Construction Management Control Process," and "The Use of CPM in Construction."

** The Wisconsin Supreme Court ruled that R.W. Construction Company, Inc. was entitled to a price adjustment according to the changed conditions clause of the contract after the contractor struck artesian water conditions which were not indicated in the contract drawings and specifications. AGC filed a friend-of-the-court brief.

** Operation Advise, AGC's new disaster relief service, is providing advisory assistance of volunteering contractors to the Federal Disaster Assistance Administration.

** AGC was quick to praise President Ford earlier in the year "for his decisive action" in signing the Federal-Aid Highway Act of 1976.

** Working with the Department of Commerce's National Bureau of Standards in a study of construction excavation, trenching and shoring standards.

** AGC continues to work closely with industry management groups, including the Council of Construction Employers, the National Construction Industry Council and The Business Roundtable.

** More than \$82,000 has been donated to the Saul Horowitz, Jr. Memorial Scholarship Fund.

NATIONAL MID-YEAR BOARD MEETING

San Antonio, Texas

October 8-12, 1976

THE 1976 National AGC Board Meeting was the largest ever attended by Contractor members from all fifty states in this great Nation. At a time when the Construction Industry is beginning to rebound, it is of important interest to note that contractors gathered together to work out their mutual problems and situations at San Antonio. Being together does create unity and strength for contractors throughout the Nation.

Members from the Virginia Branch attending the meeting were as follows: Virginia Branch State President, S.L. Lionberger, Jr., S. Lewis Lionberger Company, Roanoke; Mr. J.W. Creech, J.W. Creech, General Contractor, Norfolk; Mr. & Mrs. Aaron Conner, Aaron J. Conner General Contractor, Roanoke; Mr. & Mrs. Larry Conner, Aaron J. Conner General Contractor, Roanoke; Mr. R.M. Dunville, R.M. Dunville & Brothers, Richmond; Mr. & Mrs. N. David Kjellstrom, Kjellstrom and Lee, Inc., Richmond; Mr. & Mrs. R.E. Lee, R.E. Lee & Son, Inc., Charlottesville; and Mr. & Mrs. James F. Duckhardt, Executive Director, Virginia Branch AGC.

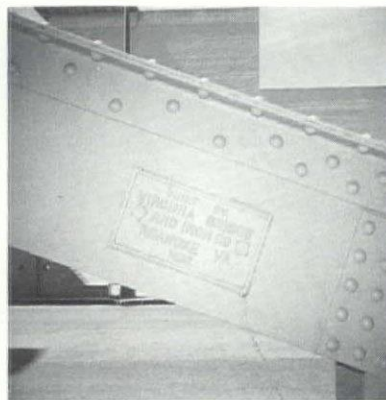
The 1977 National AGC Board Meeting will be held September 16-20 in Atlanta, Ga.



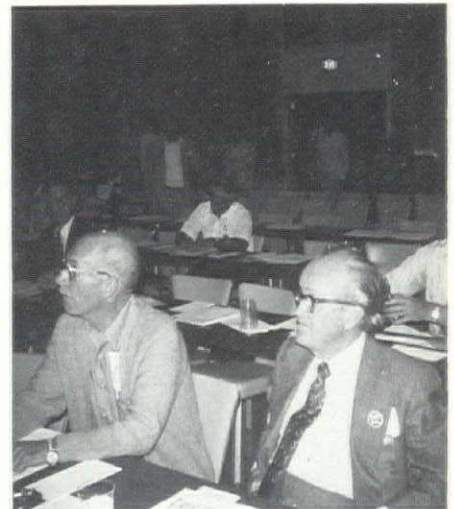
S.L. Lionberger, Jr. (S. Lewis Lionberger Company, Roanoke, Va.), President of the Virginia Branch AGC, prepares to board Shuttle Bus.



VIRGINIA BRANCH National Director, R.E. Lee (R.E. Lee & Son, Inc., Charlottesville, Va.) joins VIRGINIA BRANCH National Director, Dave Kjellstrom (Kjellstrom & Lee, Inc., Richmond, Va.) and his wife, Edie for a snack.



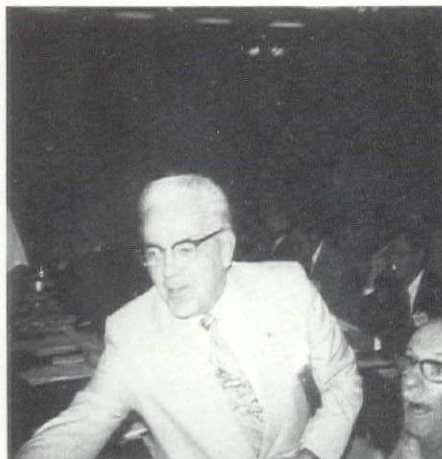
Plant on bridge spanning river in San Antonio (built by Virginia Bridge and Iron Company, Roanoke, Va. in 1922.)



National Directors, R.E. Lee (R.E. Lee & Son, Inc., Charlottesville, Va.) and Robert M. Dunville, Sr. (Robert M. Dunville & Bros., Richmond, Va.), listen to speaker.



Virginia Branch Executive Director, James F. Duckhardt, in front of fountain on grounds of HemisFair, site of the recent World Fair.



VIRGINIA BRANCH National Director, A.J. Conner (Auron J. Conner, General Contractor, Roanoke, Va.), greets friend.



Nickie Duckhardt, wife of Virginia Branch Executive Director James F. Duckhardt, stands in front of Soviet Lunar Vehicle. This was part of the Russian Exhibit held on Scientific Siberia.

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ACTION AUCTION-1976

• The AGC Education and Research Foundation held another Action Auction in San Antonio, Texas on October 10th. It was held in conjunction with the 1976 AGC midyear board meeting with all benefits going to the AGC Education and Research Foundation. Various articles are donated by AGC members and are sold to the highest bidder. Over \$64,000.00 was raised at this sixth annual event. A total of previous auctions had raised almost \$240,000.00. These funds are used in the areas of Research and Educational Program Developments.

The Virginia Branch again this year donated four Virginia Smithfield Hams valued at \$165.00. These Hams sold for a high bid of \$500.00. We are also very pleased to report that a bronze sculpture of Thomas Jefferson donated by Mr. & Mrs. R.E. Lee of Charlottesville, Va., valued at \$325.00 sold for \$875.00. Mr. R.E. (Bobby) Lee has long been a staunch supporter of the AGC Education and Research Foundation.

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Official Recognition of ACCE As Accreditation Agency for the Discipline of Construction

After years of hard work by AGC Contractors and others in the industry, ACCE has been officially recognized as the accreditation body for construction programs at colleges and universities . . . Two schools have already been accredited by ACCE and others are expected in the near future.

*Howard D. Moore, Director
Construction Education, Equal Employment Opportunity
The Associated General Contractors of America*

THE COUNCIL on Postsecondary Accreditation, Washington, D.C. has recognized the American Council for Construction Education (ACCE) as the official accrediting agency for construction curricula. The unanimous approval by the COPA Board was given on October 13, 1976.

Higher education institutions throughout the nation offering degreed construction programs have been advised to file their applications for accreditation to the ACCE.

Already expressing intention to request on-campus visitations and inspection by ACCE teams are: Bradley University, Peoria, Ill.; Auburn University, Auburn, Alabama; California Polytechnic University, San Luis Obispo; Oklahoma State University at Stillwater and Kansas State University at Manhattan.

Walter Nashert, of Oklahoma City, president of ACCE, stated that as soon as formal applications are received from the colleges and universities, ACCE visitations will be scheduled.

Schools that receive accreditation approval from ACCE will then be graduating fully recognized constructors for the industry.

The ACCE, formed in 1974 by industry and education leaders, has the support of nine national construction oriented associations including: AIC, ABC, AGC, ARBA, MCA, NCA, NECA, SMACNA and the Associated Schools of Construction. Other construction associations have been invited to join ACCE to further the effort.

The evaluations and visitations made by ACCE teams in June at Northeast Louisiana University and the University of Florida/Gainesville construction

science departments were approved and are now accredited. Their construction programs are the first in the nation to be so accredited.

There are more than 75 colleges and universities that offer construction science, management, and technology programs in the U.S.

FOR FURTHER INFORMATION CONTACT:

Walter A. Nashert, Sr., President
American Council for Construction Education
PO Box 14430
Oklahoma City, OK 73114
Phone: (405) 848-7911
or:

Prof. I. Eugene Thorson, Director
Dept. of Construction Science
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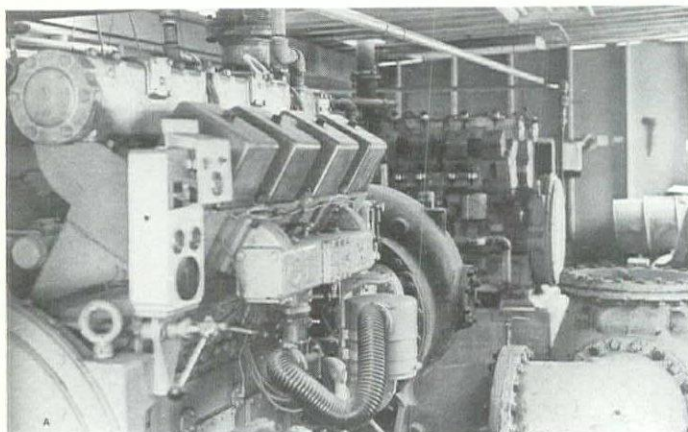
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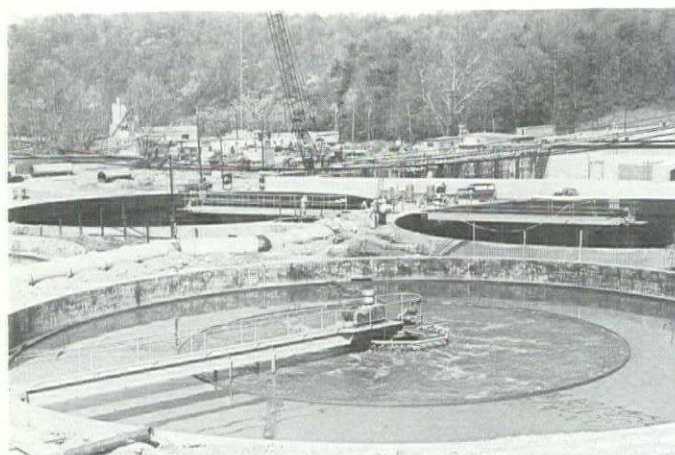
PIZZAGALLI CONSTRUCTION COMPANY presents . . . **SEWAGE TREATMENT PLANT ADDITION CITY OF LYNCHBURG**

WILEY AND WILSON, INC.
Consulting Engineers

THE city of Lynchburg has a new addition to its sewage treatment plant. Started in August of 1974 by general contractor, Pizzagalli Construction Company of Richmond, Va. and South Burlington, Vermont, the addition consists of two primary clarifiers, each 135 feet in diameter, two secondary clarifiers, each 95 feet in diameter, two 175 x 175 x 18 foot aeration basins, one 85 foot clarifier thickener and one 65 foot



The two 18 M.G.D. pumps diverted the total flow during the Phase II portion of the project.



A 30-inch concrete pipe was used to divert the flow to the two new secondary clarifiers pictured in the background.

chlorine contact tank. In addition, various pumping stations had to be constructed as well as a control building addition and ammonia and electrical buildings.

Once the first phase of the project was completed, Pizzagalli started one of the most complicated portions of the project. It included the conversion of two primary clarifiers to secondary clarifiers and the revamping of an existing chlorine tank. In addition, the two temporary eighteen M.G.D. pumps were installed to divert the total flow to the new secondary clarifiers which are 95 feet in diameter.

In July, the two new primary clarifiers were placed into operation along with the new aeration tanks. The heat treatment building was placed into operation in late summer.

The original plant was constructed in 1955 and produced eleven M.G.D. With final completion slated for Fall 1976 (five months ahead of schedule), the new 22 M.G.D. plant will serve the City of Lynchburg as well as Amherst and Bedford Counties. Wiley and Wilson, Inc. of Lynchburg, were the consulting engineers for the project.

A story on the plant was featured in the Pizzagalli Construction Company's national publication *The Blueprint*.

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Consulting Engineers



THE DESIGN OF THE Joseph B. Van Pelt Elementary School was a joint effort of the School Board, City Council, and a committee of the staff of the school system, working in conjunction with the architects.

It was decided that the philosophy of education should be a relatively open plan school building. The school was designed to accommodate 800 students in grades Kindergarten through Six. There are two Kindergarten rooms with three teaching stations in each room. Grades One through Six are in individual large open space areas with five teaching stations in each area. There is an administration and education materials center as well as one special education room and one multi-purpose room. There is a large gymnasium-auditorium combination that has a regulation high school size basketball court.

The school has a well equipped kitchen but no dining room. Food is taken to the Kindergarten rooms and First and Second Grades in food carts and the children eat at their

tables. At the end of the lunch hour, the dishes are picked up on food carts and taken back to the dish washing area. The upper grades walk to the kitchen, pick up their trays and carry them back to their tables and at the end of the lunch period, these dishes are also picked up on food carts.

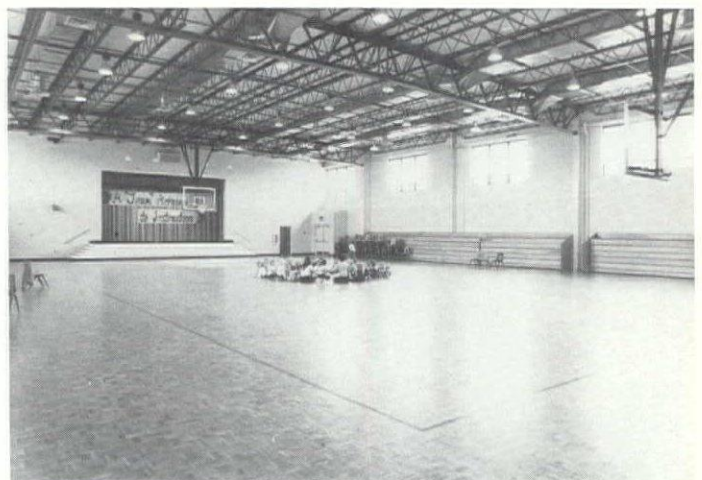
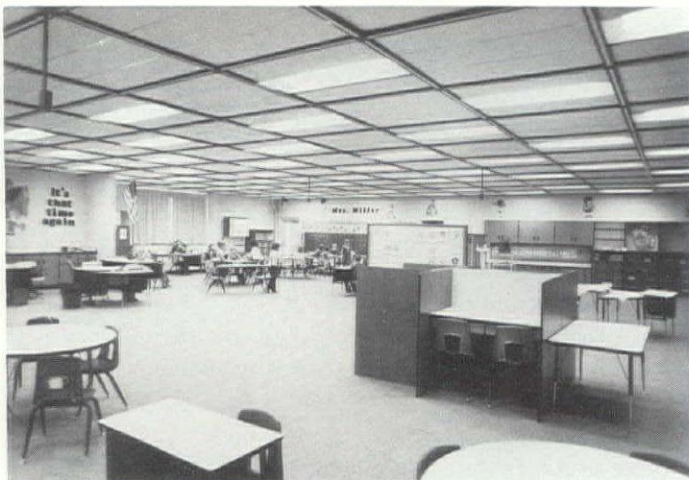
The principal of the school and the faculty indicated after one year's usage that there has been a very small amount of spillage and they are pleased with the food service system.

The school is situated on an approximate 12 acre tract on a knoll overlooking nice residential areas. There is a beautiful view for 360° around the school campus.

REP, Inc. of Bristol, the general contractor, handled foundations, concrete, masonry, waterproofing, weatherstripping and insulation.

Subcontractors & Suppliers

Carr Bros., Blountville, Tenn. excavating; Butler Manufacturing Co., Kansas City, Mo., steel, steel roof deck, acoustical & lighting fixtures; Tauscher Roof Deck Co., Blountville, Tenn., roof deck; General Roofing Co., Bristol, Tenn., roofing; Central Glass Co., Bristol, windows & glazing; R.M. Rhea Co., Bristol, painting; L.K. Poole Co., Bristol, Tenn., plaster; Joe Rainero Tile Co., Bristol, ceramic tile & terrazzo; Shankle-Clairday, Inc., Nashville, Tenn., resilient tile; ARC Tile Co., Johnson City, Tenn., wood flooring; City Lumber Co., Knoxville, Tenn., millwork; Seybar, Inc., steel doors & bucks; Rowland Electric Co., Inc., Marion, electrical work; Fred Hayes Plumbing & Heating, Bristol, plumbing; Bryant Sheet Metal Co., Bristol, air conditioning, heating, ventilating; The Good Co., Bristol, Tenn., hardware supplier; and, Belew Sound, Bristol, sound system.



BASIC CONSTRUCTION COMPANY presents . . .

FIRST VIRGINIA BANK TOWER

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Architects/Engineers/Planners

BALDWIN AND GREGG

Site Engineering

EDWARD G. CARSON, ASLA AND ASSOCIATES

Landscape Architect

INTERSCAPES, INC.

Interior Decorator

LAATEST MULTI-STORY STRUCTURE among the bank-owned and occupied skyscrapers dominating the downtown Norfolk financial district horizon is the just completed First Virginia Bank Tower.

The \$7,000,000 building is on a 1.5 acre site on St. Paul's Boulevard, just north of Waterfront Drive and facing the Municipal Court Building. The building's lobby level is devoted to the banking activities of the main branch of The First Virginia Bank of Tidewater, which moved in late September from its former location in downtown Norfolk. The bank's headquarters' operations are now located in especially designed tower suites. Including the main office in the new building, First Virginia Bank of Tidewater has 26 offices in Southeastern Virginia.

The 295,000 sq. ft. building has two main divisions, served by a central core containing five high speed elevators giving access to the eight lower levels and nine tower floors, and including the fire stairs, mechanical, electrical, janitorial, storage, water and waste facilities.

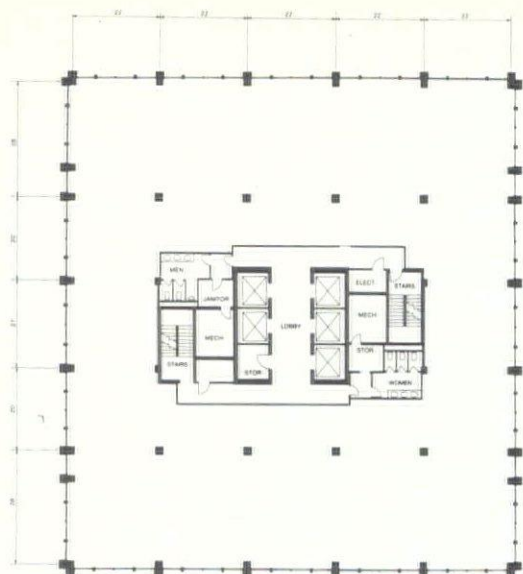
Levels two through seven of the building's base structure consist of a ramped parking garage accommodating approximately 250 cars, with outside access from the rear of the building. Controlled parking is available to tenants and visitors. Most of the top nine levels in the office tower, comprising about 120,000 square feet, other than the space occupied by the bank headquarters will be leased as offices or sold as condominium office units.

The building was designed by the Norfolk architectural firm of Dudley, Morrisette, Cederquist & Associates, which did the normal structural, mechanical and electrical, heating, ventilating and plumbing details as well as graphic design for the building, including interior design. Landscape architect was Edward G. Carson, ASLA & Associates, and site engineering was by Baldwin & Gregg.

Basic Construction Company began work on the site immediately after groundbreaking in May 1974. Due to the nature of the downtown Norfolk sub-strata, the building's foundation is on a series of concrete piles in capped clusters, many down 70 feet to found. The structural skeleton of the building is reinforced concrete, with poured-in-place concrete columns and floor slabs.

Exterior walls of the lower section of the 212-foot high modern structure are of white precast concrete, with vertical striations. The exterior of the top section, office tower, has white precast concrete columns and window mullion covers, interspaced with tinted glass windows.





Typical Tower Floor Plan

The 3,840 square foot banking lobby and the bank's tower headquarters' suites were done by the Norfolk decorating firm, Interscapes, Inc., in contemporary design utilizing light oak for a clean Danish look. Features of the lobby include "First Virginia red" carpeting and panel draperies; teller line and check tables of oak and imperial black marble; chrome upholstered chairs in coordinating shades; and beige walls, doors and trim.

Leasing of office space is being handled by Harvey Lindsay & Co., Norfolk realtors.

The building is completely climate controlled, and also has an automated sprinkler system tied into the city's fire alarm system. Norfolk's fire prevention authorities have cited the structure as "designed to be among the most fire safe in the country."

The general contractor, Basic Construction Company, of Newport News, handled excavating, foundations, concrete and carpentry.

Subcontractors & Suppliers

From Norfolk were: Snow, Jr. and King, Inc., masonry, Standard Iron & Steel Co., Inc., steel & handrails; Walker & Laberge Co., Inc., windows, window walls, glazing & acoustical; E. Caligari & Son, Inc., painting & plastic wall finish; Elliot & Co., Inc., millwork; Door Engineering Co., Inc., steel doors & bucks & hardware supplier; and, Hall-Hodges Co., Inc., reinforcing bars.

Richmond firms were: Western Waterproofing Co., waterproofing; The Howard P. Foley Co., Inc., lighting fixtures & electrical work; The Poole & Kent Corp., plumbing fixtures, plumbing, air conditioning, heating & ventilating; Dover Elevator Co., elevator; and, The Ceco Corp., slab forming.

Others were: Welch Pile Driving Corp., Va. Beach, piling; Cast-A-Stone Products Co., Inc., Raleigh, N.C., stone work; A.D. Stowe & Co., Portsmouth, insulation & plaster; The Tile Shop, Hampton, ceramic tile & resilient tile; and, Air-stream Products, Inc., Philadelphia, Pa., architectural louvers.

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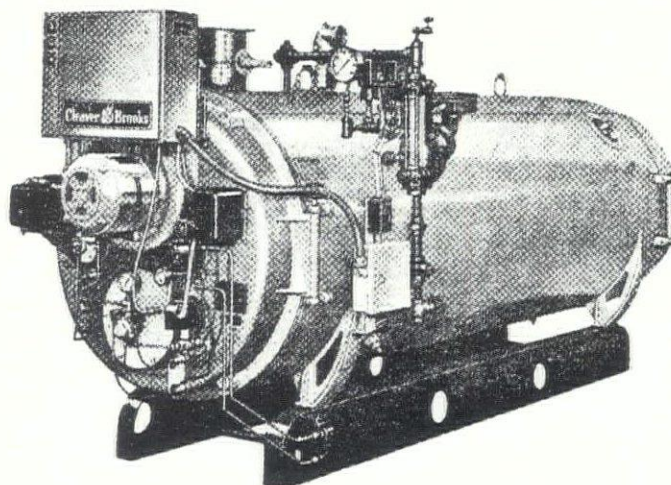
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MIXING EQUIPMENT COMPANY, INC. PLANT

LIGHT AND GUTHRIE

Architect

SYSTEMS DESIGNS

Consulting Engineer, Mechanical/Electrical

BEVERLY LUCKS HAFNER ASSOCIATES, INC.

Interior Design



RICHARD E. Phillippi, Inc., of Wytheville, served as the design/build contractor for the Mixing Equipment Co., Inc. plant located in Wytheville. Light & Guthrie, Architects, Bristol, were the chief architectural designers and Systems Design, Inc., Wytheville, provided the engineering and design for the electrical and mechanical, heating, ventilating and air conditioning systems. The entire project was completed approximately three months ahead of the original schedule as required by the owner.

The project consists of approximately 42,000 SF of manufacturing area and 4800 SF of office area. The entire structure for the manufacturing plant, as well as the office, utilizes the Butler Manufacturing Company LAND-MARK System and the MR-24 metal roof system by Butler. The structure in the manufacturing plant was designed

to support 10-ton underhung monorail crane systems throughout the entire building. Steel supports were fabricated on the columns and extra carrier beams were installed for this purpose. The manufacturing plant utilizes mercury vapor lighting and heating and ventilating system is controlled by roof top electric heat pumps with an economizer cycle. The entire slab on grade in the manufacturing plant utilizes the masterplate steel trowel finish.

The office area exterior walls consist of brick and bronze glass with an overhang of the roof of approximately 5 feet. A stone aggregate fascia panel was utilized on the fascia around the top of the office portion of the building. The interior of the office area was designed by Beverly Lucks Hafner Associates, Inc., Interior Designers, Webster, New York. The interior of the office consists of carpeting and acoustical Mayatex wallcovering for a portion of the walls. The balance of the interior walls are brick. The toilet and locker room areas have quarry tile with ceramic wainscot. The office area is heated and air conditioned and ventilated by electric heat pumps which are roof mounted. The lighting system is of the modular air transfer type which gives the owner the flexibility of utilizing wall dividers within the office area.

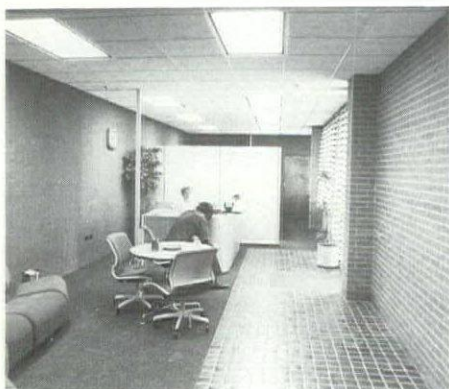
The new facility will produce speed reducers used in the company's line of

"Lightnin'" mixers and aerators. The machines and techniques to be used make it one of the most advanced operations of its kind in the world.

Richard E. Phillippi, Inc., of Wytheville, the general contractor, handled excavating, foundations, concrete, masonry, steel (Butler Mfg. Co.), carpentry and millwork.

Subcontractors & Suppliers

Central Glass Co., Bristol, windows & glazing; Tilley Paint Co., Pulaski, painting; Shields, Inc., Roanoke, acoustical & plaster; DeHart Tile Co., Christiansburg, ceramic tile & resilient tile; Southern Building Specialties, Collinsville, steel doors & bucks & hardware supplier; Rowland Electric Co., Inc., Marion, electrical work; Systems Contractors, Inc., Wytheville, plumbing, air conditioning, heating & ventilating; and, Roanoke Sprinkler Co., Roanoke, sprinkler/fire protection.



RICHARD E. PHILLIPPI, INC. presents . . .
FIRST NATIONAL EXCHANGE BANK, WYTHEVILLE

LIGHT AND GUTHRIE, Architect

SOWERS, RODES & WHITESCARVER, Consulting Engineer

AMERICAN FURNITURE & FIXTURE COMPANY, Interior Design



A DIFFICULT site, full banking facilities requirements, and pre-engineered system structure all combined to form the basis for a successful First National Exchange Bank in Wytheville.

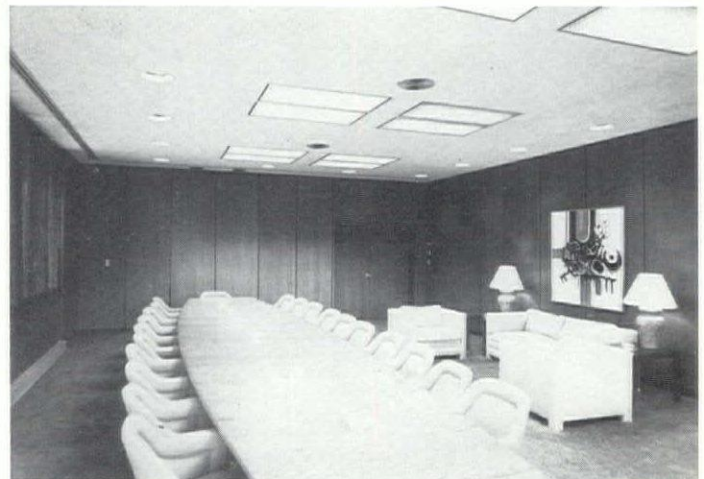
A large, spacious banking area unencumbered by columns, was made possible by the wide span of the "space truss" system. Because of the large fall in the site, a mezzanine level was used as a rear entry. The mezzanine level contains a board room, toilet, storage and mechanical equipment areas in addition to the entry. A bridge spanning from the mezzanine over the officers' area connects the main banking floor by way of elevator and stairway to the mezzanine. The second floor contains work areas, lounge, and toilets.

The facility has a gross floor area of 16,820 SF plus a separate drive-up unit of over 500 SF. The basic construction materials are brick and bronze glass window walls. The effective massing of materials combined with large overhangs make a strong continuous design statement.

The general contractor, Richard E. Phillippi, Inc., of Wytheville, handled excavating, foundations, concrete, masonry, steel (Butler Mfg. Co.), and carpentry.

Subcontractors & Suppliers

Valley Roofing Corp., Roanoke, roofing; PPG Industries, Roanoke, windows, window walls & glazing; Tilley Paint Co., Pulaski, painting; Shields, Inc., plastic wall finish, acoustical, & resilient tile; Nolen Products Co., Knoxville, Tenn., millwork; Rowland Electric Co., Inc., Marion, lighting fixtures & electrical work; D.W. Allen & Son, Inc., Hillsville, plumbing, air conditioning, heating & ventilating; and, Dover Elevator Co., Roanoke, elevator.



RICHARD E. PHILLIPPI, INC. presents . . .

DENTAL OFFICE

DRS. HATCHER, DENTON, HYATT AND GUEST

LIGHT & GUTHRIE, Architect

OWNERS & LANCASTER ASSOCIATES

Interior Design



THIS TWO-STORY OFFICE building for a group of dentists in Bristol, Tennessee, was designed for the dental practice to utilize the upper floor and for the lower floor to be leased to two optometrists and an oral surgeon.

The upper floor required complete dental facilities for the four doctors. Included in this floor were eight treatment rooms, three hygienists' treatment rooms, a complete dental lab, four private offices, a staff lounge complete with kitchen and bath facilities, a panoramic x-ray room, dark room, patient education room, recovery room, and dental assistant's preparation areas between the centrally located lab and the treatment rooms; this floor also contains a patient entry vestibule, a reception room and business office and a large waiting room complete with a built-in aquarium. This level contains a gross floor area of 4600 SF.

The lower floor contains 3,000 gross SF with a common patient entry corridor with toilet facilities, a large mechanical and dental equipment room, and a large general storage room.

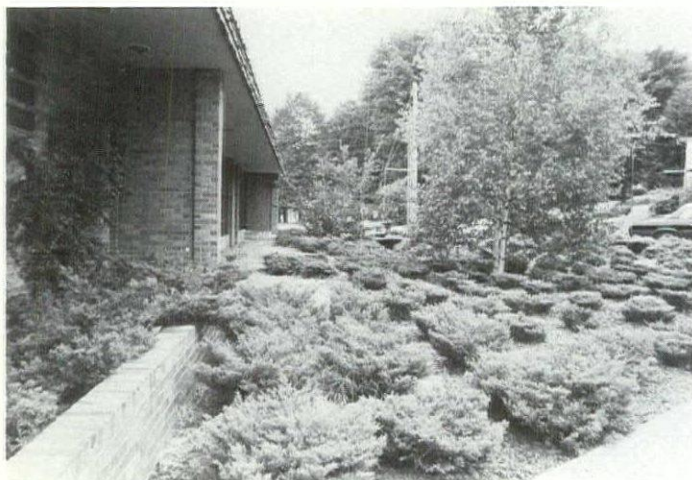
The owners had a rather constrained site which was small and pie-shaped, being bounded on two sides by streets, on the narrow end by a busy intersection and on the other end by a large old house which had been converted into an orthodontist's office and living quarters. The owners had specific requirements which made an on-grade entrance to each level mandatory, off-street parking for each level a necessity to be complete with an inter-connecting drive and

walk between the two, and maximum landscaping use made of the small amount of site left for such purposes. A separate staff entrance was also needed by the four dentists and required to be near their curb-side parking spaces.

Of utmost concern to the owners was a building which had to be a happy marriage between an older residential neighborhood on the one side and a newly developed commercial strip on the other. The seemed to dictate a warm, soft-looking building with a low profile. This was largely achieved with the use of a soft earth-toned brick exterior with colored mortar, low-rise segmental arches, bronze-tinted glass in anodized aluminum frames, and thick-butt (treated) western red cedar shakes on a sloping pre-engineered roof fascia above, which cantilevered out to a generous five and one-half ft. (5½ ft) around all four sides of the building. The building also had to be adapted to the natural grade changes on the site by the use of brick retaining walls, concrete walks and steps, and appropriate landscape planting features.

Moderate cost and speed of erection were the other two major concerns of the owners. They desired to occupy the building within a year from the date they signed a construction contract with the general contractor on a design/build basis. At this point, the architect was engaged to prepare a preliminary design for the building and site, after approval of which he was engaged by the contractor to prepare adequate construction documents. The actual construction was begun almost immediately at this point and the architect was required to prepare his documents in a sequence to meet the contractor's need in the field. This predicated close coordination between contractor and architect and the use of a clear-span type of pre-engineered structural system for the roof and a pre-engineered roofing system. This was more than adequately fulfilled through the use of Butler Manufacturing Company's LANDMARK roof structural system and the Butler MR-24 prefinished standing-seam, aluminum coated steel roofing system.

Richard E. Phillippi, Inc. (REP, Inc.) of Wytheville, Va. and Bristol, Va., the general contractor, handled excavating, foundations, concrete, masonry, carpentry, paneling, waterproofing, weatherstripping, insulation, millwork and hand-rails.



Subcontractors & Suppliers

Bristol, Virginia firms were: Central Glass Co., windows, window walls & glazing; R.M. Rhea Painting Co., painting; Joe Rainero Tile Co., ceramic tile & natural slate tile; Whitten Electric Supply, lighting fixtures; and Leonard Plumbing & Heating Co., plumbing.

From Bristol, Tennessee were: C. H. Roe, plastic wall finish; Tri-City Electric Co., electrical work; Mitchell-Powers, plumbing fixtures; and, Deal's Heating & Air Conditioning, air conditioning, heating & ventilating.

Others were: Butler Manufacturing Co., Kansas City, Mo., roof deck, roofing, steel & steel roof deck; ARC Tile Co., Johnson City, Tenn., resilient tile; and Trimble Co., Johnson City, Tenn., steel doors & bucks & hardware supplier.



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*General Contractor for the Silver Belle Restaurant
Featured in this Issue.*

ANDREWS AND PARRISH COMPANY presents . . .

SILVER BELLE RESTAURANT

CHARLES SHIFLETT - Architect

LAWSON DESIGN CORP. - Interior Designer

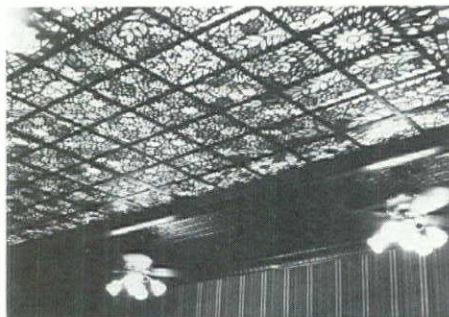


THE RECENTLY completed Dodge City at Patterson Avenue and Gayton Road houses a fast food restaurant and an elegant dining and dance club, The Silver Belle. This structure is designed to simulate a street in Dodge City consisting of six connecting buildings. Among them is a stone-front jail which is authenticated by use of bars salvaged from an actual jail demolished in the area. Other store fronts are wood siding and brick with trim, including balconies, reminiscent of the 1848 period.

Upon entering, the bar, dance hall and stage offer an elegant scene of the past. The cocktail lounge is elevated several steps above the ground floor and is adorned with a stained glass ceiling panel and barber shop fans on which frosted light fixtures are mounted.

One dining hall is elevated ap-

proximately four feet directly in front of the stage and dance floor. Another dining facility is a balcony on the extreme left and is decorated with Tiffany



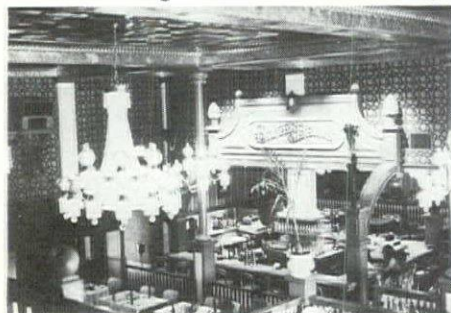
type light fixtures and an ornately patterned tin ceiling which is the covering for the major part of the ceiling for the entire building. The enormous crystal chandeliers can be dimmed or brightened to create any desired lighting effect.

Andrews & Parrish Company of Richmond was general contractor and handled foundations, concrete, carpentry, waterproofing, insulation and wood flooring.

Subcontractors & Suppliers
(Richmond firms unless noted)

E. G. Bowles, excavating; Boschen

Masonry, Inc., Ashland, masonry & stonework; Holmes Steel Co., Ashland, steel, steel roof deck & roof deck; Richmond Roofing Co., Ashland, roofing; Miller Manufacturing Co., windows, structural wood, glazing, paneling, millwork & handrails; Robert Jackson, painting; E.S. Chappel & Son, Inc., weatherstripping; Manson & Utley, Inc., acoustical; E. J. Puma & Associates, Hampton, ceramic tile; J.S. Archer Co., steel doors & bucks; R.L. Dixon, Inc., lighting fixtures & electrical work; James River Trane Co., plumbing fixtures, plumbing, air conditioning, heating & ventilating; Pleasants Hardware, hardware supplier; Trus-Joists, roof trusses; and Old Dominion Stained Glass Co., Ashland, stained glass ceiling panel.



H. PEYTON HALL presents . . .
**RESIDENCE OF
MR. AND MRS. JAMES McLANE TOMPKINS**

ROBERT M. MILLER - Architect

Landscaping & Interior Design BY THE OWNERS

BEN PULLIAM - Photography

JAMES McLane Tompkins, a Senior Officer of the Worldwide Insurance Organization the American International Group, and his wife Barbara Miller Tompkins, wanted a home which would reflect their personal interests. A home in which they could display their collections of Oriental and other art, entertain their associates and overseas friends and which would fit naturally into their wooded riverside property. After many years of working and living overseas in every quarter of the globe, they selected the Tidewater Virginia to settle in because, of its temperate climate, beauty, the real friendliness of its people, and easy access to New York City and Washington, D.C., where Mr. Tompkins' business requires him to be, frequently.

Having selected their house site on the woody Piankatank River acreage, the Tompkins spent over a year laying out the floor plan which they turned over to their architect, Robert M. Miller of New York. Their planning concentrated upon few rooms, graciously large, arranged to provide maximum fluidity between adjacent rooms or areas, plenty of wall space for their art, a great deal of openness on the riverside, and ease of upkeep, within and without.

Mr. Miller incorporated his clients wishes into a modern, one-story structure emphasizing tremendous use of natural lighting effects focusing on the beauty of the trees and the river, giving the entire house a feeling of unconfined, airy spaciousness. A floating fireplace divides the foyer from the living room, enhancing the size and depth of each, while clerestory windows, rising to sixteen feet above the foyer entrance bring light into the whole area, giving a contrast of tree tops to the riverview at the living room's end. This same use of high clerestory windows in kitchen, pantry and utility room, with "bubble" skylights in the dining room and



Front of house, showing clerestory windows of living room over entrance foyer and utility room at right.

library, set at various angles to catch the southern and western sunlight, complement the expanses of glass sliding doors in the western bedroom, living, dining and guest bedrooms which catch the eastern sun of the Piankatank. The result is a house always filled with light and lighting effects, even on cloudy days, and absolutely glowing and sparkling throughout on sunny ones.

Carpeted, wall-to-wall, throughout in off-white semiplush carpet (except kitchen, pantry and utility room which have commercial weight tweed-type carpet) over which are strewn various colorful oriental carpets. The house is easy to vacuum and sets off the furniture, mostly rosewood, teak and ironwood. One special feature is the sliding four-panel screens between living and dining room. Made in Thailand, they are of teak, hand carved, with inset panels of gossamer thin white raw silk. Each panel has over a hundred individual pieces of wood.

The library, in addition to books and records houses the Tompkins' collection of antique lead soldiers, presented

on lucite-fronted lighted shelves running in two tiers around the room.

Library, living and master bedroom have fireplaces, and there is ample closet space, whose folding doors permit maximum use of wall space, as do pocket doors into bathrooms and dressing room. The two car garage has built-in shelf space and a refrigerated wine cellar. The utility room fully carpeted, in addition to full laundry and work bench facilities, contains clothes cabinet, two cedar clothes closets and is sufficiently large to double as a two bedroom overflow for guests when



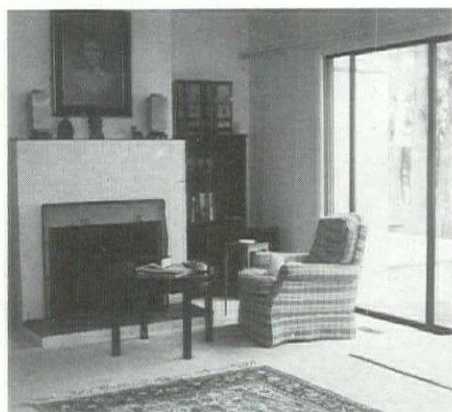
Porch, living room, library and master bedroom at rear of house.

required. The clerestory high windows flood the area with southern sunlight.

Walls throughout are plaster board painted in complementary pastel colors, setting off the art and artifacts displayed on them without distraction, blending in with the off-white carpeting and rich colors of carpets and woods of the furniture. The foyer, floored with polished Buckingham slate, leading toward the natural pink brick of the floating fireplace, adds a further touch of natural color to the entry and living room.

A screened porch and outside decks give access from kitchen, dining and living rooms one to another, and immediate outside access to guest and master bedrooms.

The grounds have been carefully underplanted with natural Virginia shrubs and bushes while the woods have been cleaned of undergrowth to permit European style walks and vistas, but,



Western bedroom, looking southeast.

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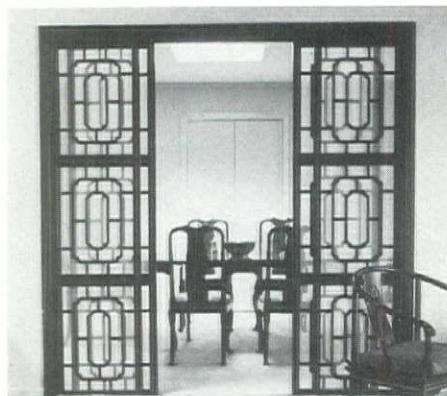
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Hampton, Virginia 23369

all the while maintaining Virginia naturalness. Azaleas, hollies of various types, crepe myrtle, rhododendron, pyracantha, camellia, and gardenias help to maintain this.

H. Peyton Hall of Saluda was general contractor and handled foundations, carpentry, weatherstripping, insulation & resilient tile.

Subcontractors & Suppliers

Rappahannock Concrete Corp., Gloucester, concrete; George H. Barrow, Toano, masonry Loving Roofing Co., Glen Allen, roofing; Bin-swanger Glass Co., Richmond, windows; Sheldon Lumber Co., Toano, structural wood; Edward Prince, West Point, painting; James C. Talbert, Newport News, ceramic tile; W.T. Fary



Screens from living room into dining room, in open position.

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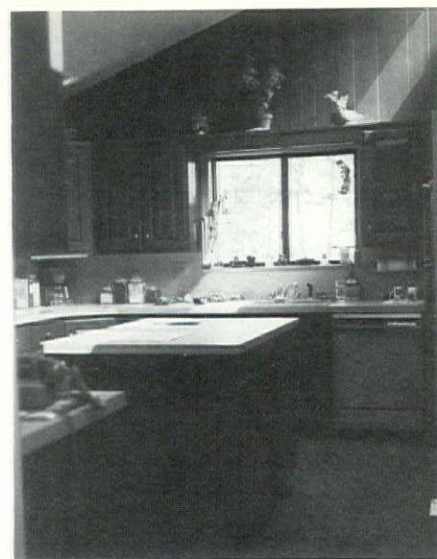
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Kitchen, with natural lighting on work area.

Bros. Co., Ark, millwork; Virginia Interiors, White Stone, carpeting; Lightolier, New York, lighting fixtures; H. Kenneth Groom, Wake, electrical work, air conditioning, heating & ventilating; Peebles Supply Co., Gloucester, plumbing fixtures; Carl F. Prince, Deltaville, plumbing; Lee-Rye Nurseries, Gloucester, planting; and Pleasants Hardware, Richmond, hardware supplier.



Living room fireplace.

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CONSTRUCTION INDUSTRY GUIDELINES

JOINT COOPERATIVE COMMITTEE

AIA - AGC - CEC - VSPE

The Joint Cooperative Committee is composed of: Virginia Chapter, The American Institute of Architects; Virginia Branch, Associated General Contractors of America, Inc.; Consulting Engineers Council of Virginia, Inc.; and The Virginia Society of Professional Engineers. These organizations have joined in presenting to the business community of Virginia, the Construction Industry Guidelines which their agencies have adopted.

This publication is offered to provide the various segments of the building industry with logical solutions to industry related problems in the form of guidelines which clearly delineate the functions, duties, and expected performance levels to which those in the building industry should adhere in order that all segments can work harmoniously, efficiently and cooperatively. They can also serve to acquaint a prospective owner with what is considered to be fair and equitable practices in the construction process.

The guidelines set forth herein are not intended to supplant the responsibilities of contracting par-

ties; nor do they preclude adjustments in order to safeguard or control a given contract; for in the final essence these conditions must be established to suit the individual needs of each project as set forth in documents for that specific contract.

These recommendations have made reference to various AIA documents and forms, since they are widely accepted throughout the Construction Industry and are generally available in most localities. Similar documents and forms sponsored by other technical and engineering societies may be used when they are deemed to better serve the objectives of the Contracting Parties.

Throughout the year of 1976 the guidelines in their entirety will be presented to the Virginia business community. It is our hope that they will be beneficial to all who peruse them.

In this edition of the *Virginia Record* we present for your information the Construction Industry Guidelines on: (22) Pre-Bid Conference; and (23) Pre Construction Coordination Conference.

pre-bid conference

Pre-bid conferences are not new. They have been and are being used for the purpose of clarifying any questions contractors might have in regard to the Bidding Documents.

Today, these pre-bid meetings assume even greater importance. This is because many critical materials specified simply cannot be obtained.

The owner, architect or engineer may very well be completely unaware of this. It is only through the contractor and his subcontractors making the designer aware of the problem that corrective steps can be taken before bids are received.

Pre-bid conferences are important in clarifying questions, ambiguities, etc. as pertaining to the Bidding Documents. In order to simplify the conference, only General Contractors bidding the project should meet with the owner, architect and engineer. It is important that the complete Architect-Engineer staff be present including Civil, Architectural, Structural, Mechanical and Electrical representatives. The pre-bid conference should be held at least 10 days in advance of the bid so that all answers and clarifications shall be issued in the form of an addendum at least five (5) days prior to the bid.

It is not the intent to exclude subcontractors and material suppliers from participating. However, such participation must be channeled through a General Contractor. Items should be concise and pertinent to that particular project.

Scope of possible areas to be reviewed and/or clarified:

1. General and Special Conditions.
 - a. Discrepancies or conflicts with the general or special conditions.
 - b. Incorporation of Mistake in Bid Bill if not a project for the State of Virginia or some agency thereof.
2. Discrepancies in Bidding Documents.
 - a. Proposal Form
 - b. Drawings
 - c. Specifications
 - d. Duplications
3. Proprietary Items and/or Equal Items. Substitutions due to availability of materials.
4. Alternates—If applicable.
5. Unit Prices—If applicable.
6. Clarifications and/or additional details required to properly estimate project.
7. Completion dates and scheduling.

General Contractors should be encouraged to forward questions in advance of the pre-bid conference so that Architect-Engineer will have prepared answers and thus tend to minimize the scope and duration of the meeting. Decisions of the conference are to be distributed to all parties receiving Contract Documents, whether in attendance or not.

pre construction coordination conference

ORGANIZATION:

The Pre Construction Coordination Conference should be held prior to beginning of actual construction, to permit all members of the construction team to fully understand the intended operational plan. It is recommended an Agenda be prepared and disseminated prior to the Pre Construction Coordination Conference.

It is essential that principle members of the construction team be represented at this meeting. The presence of the owner will enable him to better appreciate the potential operational problems anticipated by the team on the project; and will aid the total building team by: providing greater insight on specific owner needs; and, helping the architect to secure and translate team cooperation into a quality job consistent with the scheduled time and costs.

The primary purpose of the Conference is to establish acceptable ground rules for all parties concerned, and to assure that the contractor understands the complete job requirements and coordinates his work to produce a completed job in a minimum amount of time, with maximum economic gains, and in harmony with the owner, architect, engineer, and all subcontractors.

The Pre Construction Coordination Conference is primarily concerned with managerial or operational considerations. It is in these areas of contract interpretation and clarification that the greatest value of the Construction Coordination Conference can be achieved.

The Conference should include the following:

1. Owner
2. Design Professionals—All phases including Civil, Soils, Structural, Architectural, Mechanical and Electrical.

3. General Contractor—Essential personnel directly connected with the project. Project Manager (Office) and Job Superintendent (Field).

It is not the intent to exclude subcontractors; however, their presence should be limited to the major participants the contracting parties deem necessary. It should be the General Contractors responsibility to relay to other subcontractors the results of the conference as applicable.

4. Caution should be exercised to avoid making the number of persons attending any greater than is absolutely necessary to establish policies and procedures.

AGENDA

Topics for discussion depend upon the nature, size and complexity of the project; however, it is necessary to assign priorities. The VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES should be a ready reference. Although each project is different, certain factors are common to all types of construction. Suggested topics are:

1. Discussion of General and Special Conditions of the contract documents and also to appropriate recommendations of the VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES.
2. Progress Payments and Retentions
When, how, and to whom, in exact terms, stated clearly so that no question exists about requirements and responsibilities. This should apply to the area of retention and final payment. Refer to recommendations No. 1 and 18 VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES.

3. Shop Drawing and Sample Submittal Data

The form which data is to be submitted. The number of copies required and the number to be returned; the type of approval, i.e. "approved," "approved as noted," "approved as noted-resubmit," "rejected," etc. Refer to recommendation No. 14 VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES.

4. Procedure for Resolving Interferences and Conflicts and/or Composite Drawings.

What is the impact insofar as time and scheduling.

5. Insurance Requirements**6. Job Progress Scheduling**

A Construction Coordination Conference provides an opportunity for the essential involvement of subcontractors in the development and correlation of the individual schedules that make up the construction schedule. Many large projects are conducted on an overall schedule, using the CPM or the PERT systems. Such scheduling is useless unless thoroughly understood by all parties.

7. Temporary Facilities and Controls

Refer to recommendation No. 5—VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES.

8. Construction and Contract Change Orders
Refer to recommendation No. 7, VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES. Typical items for discussion include:

- a. Percentages for overhead and profit to be applied to Change Orders; What costs will or will not be included in the Change Order price;

- b. Length of time that a Change Order proposal price is to be considered firm;

- c. Designation of the individuals authorized to approve Change Orders;

- d. Procedures to be followed when submitting Change Order proposals;

- e. Change order forms to be used;

- f. Time Extensions-requests made by General Contractor due to changes in drawing or specifications;

- g. The detail required of sub-contractors when submitting Change Order proposals. Will a complete breakdown of all costs be required? Brief description. Descriptive drawings;

- h. Overtime-due to Change Orders. Consideration of decreased productivity;

- i. When materials or equipment are to be removed due to a change, which party owns it, and who removes it from the site of the job?

- j. As-built drawings, brought about due to Change Orders.

9. Guarantees and Warranties

Refer to General and Special Conditions of the Contract Specifications also to recommendation 2 VIRGINIA CONSTRUCTION INDUSTRY GUIDELINES.

10. Other Items such as:

Bonds
Punch List
Substitutions
Job-Site Security

FOR THE RECORD

FMC ANNOUNCES STUARTS DRAFT SITE

• Chicago based FMC Corporation, one of the nation's hundred largest companies, has announced it plans to build a major manufacturing facility here. Construction is expected to begin next month on a 63-acre site purchased from Maynard and Sue Hockman and recently re-zoned for industrial purposes.

The new plant, to eventually employ more than 170 workers, will produce industrial drive products for the company's Drive Division. The new facility, which is expected to begin production in 1978, will occupy 93,000 square feet of manufacturing space.

According to Division Manager Glenn D. Tobias, "After careful study, the site was chosen from among 20 possible locations in six states. The main reasons are its proximity to major markets and suppliers; the quality of schools, and availability of vocational, technical and office skills training."

The Stuarts Draft plant will be designed to optimize the Division's operating efficiency by manufacturing high volume products such as couplings and speed reducers. The Division's existing plant in Philadelphia, Penna. will now devote its full capacity to meeting the increased demand for custom manufacturing and mechanical adjustable speed drives.

The new plant, which will meet stringent environmental standards, will be entirely consistent with nearby industrial activities and the Shenandoah Valley in general.

When operational, it is expected that over half of the workers will be moderate - to highly-skilled. Equipment installation and training of personnel will begin in July of 1977, with the aid of the Special Training Division of the Virginia Department of Community Colleges in cooperation with the Augusta County VO-TECH School. Assistance on the site study itself was provided by the Stuarts Draft Businessmen's Association and the Virginia Division of Industrial Development.

Headquartered in Philadelphia, the Drive Division manufactures a complete line of geared and chain-driven speed reduction machinery, including shaft couplings, speed reducers and the well-known P.I.V.® (positive, infinitely variable) Drive. This proprietary, self-adjusting product revolutionized the industry when first introduced. More recently, FMC unveiled a new model P.I.V. with important design advances. The P.I.V. is used primarily by the chemical, fibers, forest product and pulp and paper industries.

FMC Corporation is a major producer of machinery and chemicals for industry and agriculture. In Virginia, the company has long manufactured cellophane and other film products in Fredericksburg, and agricultural machinery in nearby Woodstock. Recently, FMC sold its former Fiber Division, with plants in Radford and Front Royal, to Avtex Fibers, Inc., which continues operations in Virginia as part of a new corporate entity.

Overall, FMC has approximately 41,600 employees at 129 production facilities in 32 states and 13 foreign countries. Total sales in 1975 were in excess of \$2 billion.

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NORFOLK—NEWPORT NEWS

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FIDELITY NATIONAL BANK PROMOTES THREE

• Henry L. Schwartz, Assistant Vice President and Manager - International Operations at Fidelity National Bank, Lynchburg, has been promoted to Vice President, according to an announcement by Lewis B. Goode, Jr., President. Schwartz joined Fidelity in August of 1972 as International Operations Officer and was promoted to Assistant Vice President and Manager of the department in May of 1975.

Schwartz has over 25 years experience in commercial international finance having served as Letter of Credit Manager and International Operations Supervisor at Citizens and Southern National Bank in Atlanta, Georgia prior to joining the Fidelity staff. He was also associated with Bankers Trust Company and Royal National Bank in New York for 10 years and worked in International Operations at A.J. Arm-

strong, Inc. and South American Minerals and Merchandise Corporation, leading export and import firms based in New York.

Schwartz attended Columbia University and City College of New York and has participated in various seminars and courses at the American Management Association and the American Institute of Banking. He has been active in the Lynchburg Chapter of A.I.B. serving as an International Banking instructor.

He is currently secretary-treasurer of the Piedmont Foreign Trade Council and is a delegate to the Committee of International Banking in New York. A member of Bethlehem Lutheran Church, Schwartz serves as an auditor and usher. He and his wife, Hilda, are the parents of five children.

In other moves, two staff members of the Fidelity National Bank Master Charge Department have received promotions. They are William M. Moore, Credit Card Officer, who has been named Assistant Vice President and Credit Card Officer, and Dan L. Elmore, Sales Manager, who has been promoted to Credit Card Officer.

A native of Florence, South Carolina, Moore joined Fidelity in March of 1973 and was promoted to Credit Card Officer in August of 1974. A graduate of McClenaghan High School in Florence, he received a B.S. degree in marketing from the University of South Carolina at Columbia. He has also completed several courses sponsored by the American Institute of Banking.

Moore holds the position of Second Vice President in the Lynchburg Breakfast Lions Club and is a member of the Lynchburg Squash Club. He is married to the former Doris Bradley.

A Lynchburg native, Elmore joined the Fidelity staff in April of 1973 as a Management Associate in the Master Charge Department. He is a graduate of E.C. Glass High School and attended Virginia Polytechnic Institute. He has also completed several A.I.B. sponsored courses. He is married to the former Delma Payne.

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MASSACHUSETTS FIRM TO OPEN BRANCH PLANT IN FORK UNION

• Bestpak, Inc., manufacturers of paper and plastic packaging products, located in the Boston suburb of Natick, Massachusetts, has announced that it has completed a lease-purchase arrangement for a branch plant in Fork Union.

Founded 25 years ago by John Herrick, President, and Paul Thompson, Treasurer, Bestpak today sells a wide range of packaging products to large, nationally known bakers and other producers of candy, food and other consumer products. Customers include Nabisco Inc., and F. F. V. Interbake Foods Inc., (formerly Southern Biscuit Company) who have plants in Richmond. The Fork Union plant will serve the southern area of the United States.

A company spokesman said that Virginia was chosen as the site for the new plant, after a lengthy study, because of its strategic location, progressive financial and personnel policies, and its excellent training-assistance program.

Key manufacturing personnel are now being recruited and it is expected that production will begin in late October. The plant will operate three production shifts with an expected initial work force of 40 people after training is completed.

The Virginia State Chamber of Commerce and The Division of Industrial Development worked closely with Bestpak in its plans.

CAROLINA STEEL TO OPEN SERVICE CENTER IN RICHMOND

• Carolina Steel Corporation, with headquarters in Greensboro, N.C., will open a Service Center in Richmond, according to John W. Robinson, vice president. Mr. Robinson is in charge of Service Center operations for Carolina Steel.

The new Service Center will be located in Hammond Industrial Park on Charles City Road near Byrd Airport. Plans call for the facility to open on Monday, January 3, 1977.

The Service Center will carry a large inventory including hot-rolled bars, cold-finished bars, structural steel shapes, aluminum and stainless steel

sheet, plates and bars. Saws and plate cutting equipment will be available to cut material.

Carolina Steel's new Service Center will serve the Richmond and Tidewater areas. The company will continue to serve this area from its Service Center in Lynchburg until the new plant opens.

This will make the eighth Service Center for Carolina Steel. In addition to Richmond and Lynchburg, the company has Service Centers in Roanoke; Greensboro, Winston-Salem, Hickory and Wilson, all in North Carolina, and in Greenville, S.C.



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An Open Letter . . .
(From page 5)

systems in this state and also that they are not in need of continual maintenance. It is absolutely essential, in my opinion, that the Highway Trust Fund be continued and that funds for road improvements, expansion, and maintenance not be diverted to other uses. We are fortunate to have a reasonably good road system in the state and must preserve it from deterioration.

Yes - my fellow Virginians, I am proud to be a part of building a better Commonwealth and the Virginia Branch of the A.G.C. is proud to have served the construction industry in its capacity as spokesman for all builders.

From the busy piers at Hampton Roads, to historical Charlottesville, to the industrious coal mines of the Southwest - Virginia has something for all that is truly ours to love.

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