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IN THIS ISSUE

Guest Editorial by Frederick E. Baukhages, IV ........................................ 5

THE VIRGINIA ARCHITECT SECTION

AIA News ........................................... 6
New Members ....................................... 7

WILLIAMS AND TAZEWELL & ASSOCIATES, INC.
Home Office for Mutual Federal Savings & Loan ..................................... 8

MOSELEY-HENING ASSOCIATES, INC
W. W. Gordon Elementary School .......................................................... 12

JONES AND STRANGE-BOSTON, ARCHITECTS/ENGINEERS
Richmond Medical Park ........................................................................... 14

BYRON R. DICKSON, ARCHITECT
New Apartment Facility for The Methodist Home ................................. 16
Operations Center Expansion—Dominion Bankshares Corp. ................ 30

FREEMAN AND MORGAN
Brandermill Country Club ................................................................. 18

VVKR INCORPORATED
Courthouse for the City of Salem ......................................................... 20
Wood Products Research Center, VPI & SU ......................................... 28

SMITHEY AND BOYNTON
Roanoke Fire Station #6 ........................................................................ 24

THOMAS CULBERTSON, AIA
The Carpet House ................................................................................. 27

For the Record ......................................................................................... 33
Index to Advertisers ................................................................................ 45

ON OUR COVER is the unique home office facility for Mutual Federal Savings & Loan Association in Norfolk. The project is presented on page 8 of this issue. (Cover photo by Lawrence S. Williams, Inc.)
nflation/Recession

To all outward appearances there were no signs of construction industry recession in the Fall of 1979 as a record dollar volume of work in progress was being completed. Partially obscured by this strong showing but visible upon scrutiny are the signs that the four-year-long expansion of the construction cycle was running out. In point of the fact, this year's nine percent gain in value of construction completed is all inflation as the physical volume of work was less than in 1978, and to make things worse the value of new work being started hit its high in the first quarter of 1979 and began to slide in the second and third quarters.

This change is the construction industry's reaction to the country's double-barreled and interconnected problems of inflation and recession. Monetary curbs aimed at slowing inflation coupled with budgetary curbs began to slow the pace of construction activity early in the year, effectively turning off the housing and public works segments of the industry. This course of events left only commercial and industrial building to maintain and sustain the flow of construction projects but, with the economy turning into recession, support from these sectors could not and can not be counted on for long. For the remainder of 1979 and into 1980, this slide did and will continue as the cost of money continues to adjust to deter inflation, as public works spending restraints are continued, and as recession continues to curtail commercial and industrial building.

While the move of the Federal Reserve Board, which began construction industry decline early in 1979, represents a bitter pill to swallow, it was an overdue action. We have been suffering from a buy-borrow now because it will cost more later syndrome and as a result the dollar has suffered against foreign currencies because foreign markets have no confidence that we can do something to halt inflation. So, even though it has been an unpopular move, the Government's tightening of money supplies was necessary to strengthen foreign confidence in our economic policies, to strengthen the dollar on international markets and, most importantly, to curb inflation before it runs away from us and sends us into a deep recession.

Because of the Fed's actions the construction industry faces a real dilemma, a credit crunch; not only expensive money but a scarcity of money at any price. Designers, builders and buyers as well as many others with a stake in the health of the construction industry are, therefore, thrown into the anti-inflation fight. While the tight money situation is bitter medicine it is necessary as a short term solution, a brake on run-away inflation. It cannot be the ultimate or long-range answer because in and of itself it will only cause more inflation in the construction industry as well as in other sectors of our economy.

Traditionally in times of tight money and recessive economy, the development industry (designers, builders, owners and developers) begins to pull in its horns. With the falling-off of work comes a decrease in production and manpower utilization which eventually leads to layoffs and creates higher unemployment. When the economy begins to return to normal, projects previously shelved as well as new projects face the industry with personnel numbers unable to handle the demand and the production capacity required. This cycle from feast to famine to feast only fuels inflation in the development industry.

We need, therefore, a long-range solution to the inflation/recession problem, a solution which goes beyond tight money. A great deal more solution is needed if we are to achieve a more stable, more predictable economic climate. For now, there may have been no other choice than to squeeze the money supply because of the urgency of our problem. But this harsh step will be forught and the construction industry's hardships will count for nothing if fiscal measures alone are expected to halt runaway inflation. There are too many other factors fueling inflation and a lot more long medicine is needed. We must develop a national energy plan. Intermittent bursts of double digit energy cost increases during the 1970s have become built into the steadily rising base rate of inflation and have struck with particular impact on the construction industry. Without some national plan we are at the mercy of the OPEC Nations. Their price increases boost the rate of inflation, widen the gap in the balance of payments and further weaken the dollar. We must put a lid on deficit spending which expands the money supply without a corresponding productivity growth. The Federal Government controls better than thirty percent of the economy. Merely stopping the expansion of Federal bureaucracy is not sufficient, they must be cut back. We must have more incentives for investment in the future. Tax policies must be revised to encourage investment in new utilities, new equipment and new technology. 

(Continued on page 40)
Nine individuals who have made "distinguished contributions to the architectural profession or to its allied arts and sciences" have been elected honorary members of The American Institute of Architects. They are:

—Ise Gropius, German-born author and preservationist, who has introduced hundreds of persons to a knowledge and love of architecture via her book, lectures, and tours of the energy-conscious house designed in 1937 by her late husband, Walter Gropius, in Lincoln, Mass.;

—Lady Bird Johnson, former First Lady of the United States, whose efforts have successfully called attention to and dealt with concerns of the national and built environments and whose "leadership in preserving and improving the quality of life" has set an example "from which the whole world can learn," noted her nomination;

—Paul Mellon, business and foundation executive/philanthropist, who, as president of the National Gallery of Art and chairman of its building committee, has made "design excellence the highest order possible in a building"—the gallery's East wing, designed by I. M. Pei, FAIA—"dedicated to serving the cultural needs of diverse peoples,"..." said his nomination;

—Maria Fay Murray, director of the AIA award programs for 15 years, who has served various Institute programs with "the fullest measure of professional concern and conscientiousness... perseverance for fairness, quality and procedural continuity and consistency that the jurying and premiating process should entail," according to her nomination;

—Walter F. Pritchard II, director of consultant architecture and engineering for Southern California Edison Co., who has worked with chapters to develop the practical application of energy conservation techniques to architectural design;

—Mario G. Salvadori, New York City structural engineer/teacher/writer, who has inspired three generations of architects and engineers at Columbia University and whose series of books on architectural structures revolutionized the approach to teaching structure to architects and children;

—Julian B. Serrill, executive director of the 35-member Iowa Chapter/AIA since 1965, cited for developing an active political action program, formulating a new continuing education committee and seminars and leading the chapter to a steady growth with an increase of 50 percent in corporate members;

—Mary Chapman Smith, executive director of the Arizona Society/AIA since 1975 and former executive secretary of the Central Arizona Chapter/AIA, whose professional administrative ability and leadership have inspired all AIA components;

—Mary Gerold H. (Katie) Westby, national organizer for the arts and humanities and Tulsa civic leader, who has provided leadership to make the arts and architecture a central part of life and who has been instrumental in legislation requiring one percent of capital expenditures be committed to the arts.

Selected by the AIA Jury for Honorary Members, the nine individuals will receive the honorary memberships during the AIA national convention, June 1-4, in Cincinnati.
NEW MEMBERS

WILLIAM H. ATWOOD, AIA
With Vickery Partnership in Charlottesville
Graduate of University of Florida
Masters degree in Architecture—1972—University of Florida
James River Chapter

CHRISTOPHER R. ATWOOD,
Associate
With University of Virginia Medical Center, Charlottesville
1977 Graduate of University of Virginia,
B.S. degree
James River Chapter

WILLIAM A. EDGERTON, AIA
Maintains his practice with Baker, Heyward & Edgerton in Charlottesville
1972 Graduate of University of Virginia,
B.A. degree
1976 Masters degree—University of Virginia
James River Chapter

KENNETH A. S. GIANNINY, Associate
With Ernie Rose, Inc., Richmond
1979 Graduate of Virginia Tech—B.A. degree
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Mutual Federal Savings & Loan Association
Home Office, Norfolk
Williams and Tazewell & Associates, Inc. — Architect

Mechanical Engineer, Vansant & Gusler • Electrical Engineer, Vansant & Gusler • General Contractor, E. T. Gresham Co., Inc. • Photography, Lawrence S. Williams, Inc.
Mutual Federal Savings and Loan is unique in several ways. Situated in the heart of the redevelopment area in downtown Norfolk, its design incorporates solar energy and natural lighting as well as several other unusual features. Williams and Tazewell Architects responded to an exciting challenge.

Joseph L. Weller, President and Chairman of the Board of Mutual Federal explains—

"When the Norfolk Redevelopment and Housing Authority decided to acquire our former home office, those in a position of planning at Mutual Federal thought positively. We welcomed the opportunity to plan a new facility that would not only offer the ultimate in service to our customers but would project the image of a modern, progressive financial institution.

Our site considerations included convenience in relation to our old home office, and one which had ready and safe access traffic wise. After these questions were resolved, our planners met with representatives from several local architectural firms. They were charged with creating a building that would be open and inviting in appearance with convenient accommodations for all present and foreseeable customer needs. Additionally, the new building would have an exterior design which was compatible with other neighboring structures such as the Chrysler Museum. Another consideration was that it would be designed and engineered to conserve fossil energy by taking advantage of the latest technology in the utilization of solar energy.

Although our goals and objectives were quite extensive, the selected architectural firm met the challenge. The new facility has been most well received by customers and staff and has received most favorable comment from the public in general."

Satisfying the needs of the client is of primary importance to Williams and Tazewell, the architects for the project. The firm has interior designers and engineers as well as architects...
and many disciplines were brought into the project. The interior designers were assigned to restructure and redesign the interior of the existing building, refurbish it and coordinate the interior of the new building.

Besides designing the new building, the architects put a new entry on the old building which is adjacent to the new facility. There were initially some special problems in the general area for the new structure. Because the site was previously a redevelopment area where buildings had been razed, there were many old brick foundations and walls, some below the surface, that had to be first removed as they could cause uneven settling and other construction problems.

Since solar energy was an important part of the design, Williams and Tazewell felt the fuel conservation element of solar panels not just appear to be “stuck on” or hidden from view. It is instead a sloped wall surface that extends upward to form a two-story area which blocks the west and southwest afternoon sun, in addition to collecting heat. The energy consumption savings are expected to be about 40% during the winter.

Besides the design itself, one of the most beautiful elements of the building is the exterior finish. It is a special color of the Italian marble, travertine.

Travertine was selected because of its beauty, stateliness, weathering properties and because it blends nicely with the Chrysler Museum which is diagonally across from Mutual Federal. The museum was built in the early 1980s with a new wing also designed by W&T, added recently.

The museum was finished in limestone and finding travertine to blend created some special problems. Most of old Rome, Italy is built in the beautiful marble and that’s where Williams and Tazewell had to go to find the exact shade and type of travertine necessary.

Inside the structure, there is a great use of natural light. The central space is a two-story volume. The natural light is accomplished by using insulating glass forming a half-pyramid that rises from the ceiling to the roof and just above. This large glass area also acts to tie together the one-story street side with the two-story rear section. It is this massing of the first and second story which helps to maintain a human scale on the exterior. This stepping or layering is reinforced by the introduction of an outside raised planter wall which turns the corner and establishes the edge from which the stairs begin.

The feeling one has upon entering the interior mass is of great expanse, although the space is relatively small. There is also serenity because of freedom of noticeable supports. Plus, no amount of electrical illumination can compete with the loneliness derived from the natural light spilling from the skylight above. Shadows from this clear ceiling dance across the rust colored carpet offering a continual changing pattern of light. Shifting cloud formations are made visible to both customers and staff, creating a natural ambiance that is pleasant to work with on a daily basis and is refreshing to customers.

E. Bradford Tazewell, principal in charge and Chairman of the Board of Williams and Tazewell says, “Our firm places great importance on good design within the budget constraints. The mutual cooperation with our client Mutual Federal, in the persons of Joseph L. Weller, President and Samuel W. Hill, Executive Vice President, was ideal. We feel this project met the needs of the client and was an exciting design opportunity for our firm.”
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W. W. Gordon Elementary School
Chesterfield County
Moseley-Hening Associates, Inc. — Architect

Mechanical Engineer, Hankins and Anderson, Inc.
Electrical Engineer, Hankins and Anderson, Inc.
Structural Engineer, Dunbar, Milby and Williams
General Contractor, Andrews Large & Whidden, Inc.
Photography, Huffman Studio.

VIRGINIA RECORD
12
Energy conservation was a major thrust in the design of the W.W. Gordon Elementary School. With the aid of engineering consultants, Han-lins and Anderson, Inc., of Richmond, MHA, Inc. analyzed the costs and pay-back periods, in energy savings, of numerous building components. A solar heating system for building heating was rejected because of high initial costs and too long an amortization period, but the following energy saving features were accepted for construction:

- **Solar Hot Water Heating**: Provided by a flat-plate, air-to-water solar collection system.
- **Earth Berms**: Graded against exterior walls up to window height to provide natural insulation.
- **Shading of Windows**: Accomplished by deep overhangs on sides of the building receiving direct sun. This reduces heat gain on walls and windows from solar radiation, reduces glare, and thus lowers artificial lighting levels normally needed to combat glare from outside.
- **Double Glazing of Windows and Extra Insulation**: Walls and roof also reduce heating and cooling loads.

Particularly noteworthy is the fact that these energy-saving features were achieved in a construction bid of less than $34.00 per square foot (Continued on page 41)
Richmond Medical Park
Richmond
Jones & Strange-Boston — Architects/Engineers

Landscape Architect, Kenneth R. Higgins • Mechanical Engineer, Jones & Strange-Boston • Electrical Engineer, Leo T. Griffin • Structural Engineer, C. T. Bomlin • Civil Engineer, William J. Schmit & Assoc. • Parking Engineer, Harland Bartholomew & Assoc. • General Contractor, Taylor & Parrish, Inc. • Photography, Bruce M. Justice, AIA.
Location is always one of the prime considerations in a Medical Service Facility. When Tran-
sum Properties, a Richmond developer, undertook to meet the long established need for a first-
class west end Medical Office Park, the optimum site was a hilltop with jealously guarded single-
family zoning. Since the fourth side abutted the commercial strip along Henrico County’s Broad
Street Road, the price of the land prohibited its residential development—hence an unsuccess-
ful 18-year battle to rezone had been in progress when the developer began this project.
The concept was developed by the architect to maintain residential scale and materials and
minimize traffic interference with the quiet neighborhood streets. On this basis the site was
successfully rezoned and the project moved forward in its first phase to construction (60,000
square feet of building area).

Economic land use required 120,000 square feet of building area, which created conflicts
with the residential scale commitment to the neighbors. The solution adopted was to exca-
vate the hilltop to a sunken courtyard so that two-story buildings could be used, with grade-
level entry to each floor, reasonable building separation for scale, and a low profile as seen
from the surrounding residential area.
The project was divided into eight buildings, which allowed a stimulating mix of volume,
orientation and spatial relationship to the other supportive areas in the park. Parking is close to
five cars per 1000 square feet (well above the county minimum) and is linked visually to the
buildings by the strongly accented “pick-up point” shelters between each pair of buildings.

Untreated redwood plywood furred over concrete masonry was chosen for the exterior walls
as a result of life cycle cost studies. Weathering of the wood is proceeding well, with the interest-
ing variegations in color now evident on the way to a soft gray. Hand-split cedar shakes were
used on the roof to preserve the residential character.

Bronze single glazing was selected for initial construction (before the energy “crunch”) with
provision made for double glazing at a later date. Due to the small subdivisions inherent in
(Continued on page 43)
New Apartment Facility
The Methodist Home, Roanoke
Byron R. Dickson — Architect

Landscape Architecture, The Owner • Interior Design
Byron R. Dickson, Architect • Mechanical Engineer
Lawrence E. Perry & Associates • Electrical Engineer
Lawrence E. Perry & Associates • Structural Engineer, Richard L. Williams • General Contractor, Q. M.
Tomlinson, Inc. • Photography, Byron R. Dickson
Architect.
In late Spring of 1979, The Methodist Home in Roanoke began occupancy of their new twelve unit apartment facility. This project represents the Home's commitment to accommodate the ever increasing demand for retirement housing.

The site is a part of the Home's twelve acre complex located in northeast Roanoke. The portion of land used for the new apartments, while contiguous, is not functionally a part of the original grounds, being separated by a roadway to the south. Another roadway borders the site to the east, a golf course to the north and a magnificent old Tudor residence to the east. Topographical features permitted a two level development of the units.

The proximity of the main facility, which is within three-hundred feet of the new apartments, offers convenient access to central dining and leisure facilities. The new apartment facility enjoys enough separation to create a feeling of independence from a terminal care facility, however, it is efficiently close by to assist the progressive needs of the aging resident. The apartment units provide shelter for retired residents who are fully ambulatory and self-sufficient. Aside from providing certain amenities consistent with housing for the aging, project development is in keeping with the needs of conventional apartment dwellers.

Occupants of this apartment project are eligible to utilize the medical services of the Roanoke Methodist home and may transfer their residence to the Home when their needs are best served by such relocation. All "Home" accommodations are available to the apartment occupants on a need basis while they are residents of the apartments.

The total enclosed area of the project is 13,100 square feet. Twelve apartments are provided, six in each of two identical buildings. Both buildings have two levels containing three units. Each apartment contains approximately 1,100 square feet distributed between a living room, two bedrooms, bath, kitchen/dining area, utility room, pantry and usual storage provisions. Either a covered deck or patio is attached to each unit.

The structure is wood frame using brick veneer and wood siding and a Fiberglas shingle roof.

A unique feature of this two-story complex is the elimination of steps needed to reach any given apartment. This is achieved through a clever arrangement of decks and bridges which span the required open areas below. The site has been carefully recontoured to minimize the grade differences between parking lot and entries. Strict attention has been given to the preservation of existing vegetation. The amenities package provided for the occupants includes a complete kitchen, carpet throughout and year-round air conditioning.

The following performance goals were the basis for project development:

- Compactness for convenience and economy;
- Design and construction for maximum safety;
- The effect of spaciousness and livability;
- A high degree of privacy;
- Minimize the effort required for housekeeping activities;
- Careful avoidance of an institutional look.

Q. M. Tomlinson, Inc. of Roanoke was general contractor.

Subcontractors & Suppliers
(Roanoke firms unless noted)


Also, South Roanoke Lumber Co., millwork, wood doors & windows; Skyline Paint & Hardware, Inc., hardware supplier; James E. Lyle, Jr., plaster contractor; National Buying Service, resilient tile; Elmer M. Jones Painting & Decorating, Salem, painting contractor; Dickerson-Trent, Inc., plumbing contractor; Bud Weaver Heating & Air Conditioning, heating/ventilating/air conditioning contractor; and Milton Electric Service Co., electrical contractor.
Brandermill Country Club
Midlothian
Freeman & Morgan — Architects

Landscape Architecture, Brandermill Planning Department • Interior Design, Clarke Plaxco • Mechanical Engineer, Freeman & Morgan, Architects • Electrical Engineer, Freeman & Morgan, Architects • Structure Engineer, E. J. Beamon, Consulting Engineer • General Contractor, Heindl-Evans, Inc. • Photography, T. Revere.
Brandermill, a design oriented community in Chesterfield County has just begun using its new Country Club, Pro Shop and Pool facilities.

The Club was designed using the Design/Build team concept. Freeman and Morgan, Architects coordinated the efforts of Mr. Clarke Plaxco, Brandermill Planner, and Heindl-Evans, Inc., the general contractor.

The program called for a structure that was economical and would fit into the transitional style previously established by Sunday Park, the Brandermill Sales Center.

The completed Country Club and Pro Shop houses a restaurant, facility room, game room, locker rooms, reception area, manager's office, tennis pro office, golf pro office, pro sales area, golf bag storage, shoe repair facilities, pool bath house and snack bar.

The first phase of the project involved the construction of the golf course designed by golf pro Gary Player and the construction of outdoor tennis courts and viewing stands. Phase two called for the construction of the Country Club/Pro Shop and competition pool.

The completed project was a major contribution for Brandermill in being awarded the Best Planned Community in America by Better Homes and Gardens magazine and the National Home Builders Association.

Heindl-Evans, Inc. of Mechanicsville was general contractor and handled excavating and carpentry.

Subcontractors & Suppliers
(Richmond firms unless noted)

to tell the Virginia Story

February 1980
City of Salem Courthouse
Salem
VVKR Incorporated — Architect

Structural Engineer, VVKR Incorporated • Mechanical Engineer, VVKR Incorporated • Electrical Engineer, VVKR Incorporated • Landscape Architect, VVKR Incorporated • General Contractor, Graves Construction Co., Inc. • Photography, VVKR Incorporated.
The plan of the new Salem Courthouse regulates a variety of complex and exacting functions which include public, prisoner, witness, judicial and law enforcement activities. The building, designed by the Roanoke office of VKR Incorporated, meets the demands of the program by providing separate circulations systems that insure the security of all groups involved.

The expandable, linear building has one entrance to each of its three segregated areas. Public functions are accessible from a public corridor on the main level. Judges and jurors use a separate, controlled corridor, also located on the main level. Prisoners are moved from holding cells along a corridor on the upper level to secure stairwells that service individual court-rooms directly below.

The Courthouse, which received an honorable mention award from the Blue Ridge Chapter of the Virginia Society AIA, was also chosen as one of 29 projects exhibited at the 109th Congress of Corrections in Philadelphia where it was one of six to receive a citation for excellence.

The design provides a sense of dignity without sacrificing human scale. Materials, forms, and spacial relationships are compatible with the surrounding structures and are in keeping with the scale and character of the community. The building utilizes both masonry and steel construction with brick being the major exterior material. Insulated glass and dark aluminum trim are highlighted by brick soffits and sloping...
sills. The sloping copper roof articulates the prisoner circulation corridor and adds a dramatic effect to exterior elevations. The mechanical system employs and energy efficient, central water-to-air heat pump.

Graves Construction Co., Inc., of Blacksburg was general contractor.

Subcontractors & Suppliers

From Roanoke were: Joe Bandy & Son, Inc. excavating; Paul Overfelt, concrete contractor; Concrete Ready Mixed Corp., concrete supplier; Oxford Building Services, caulking; L. R. Brown Sr. Paint Co., painting contractor; Cates Building Specialties, specialties; G. J. Hopkins, Inc. plumbing/heating/ventilating/air conditioning contractor; and Superior Exterminating Co., Inc., soil treatment.

Salem firms were: Old Virginia Brick Co., Inc. masonry supplier; McClung's, miscellaneous metal; Leonard Smith Sheet Metal & Roofing, Inc. other roofing; Marion Glass & Aluminum, Inc. glazing contractor; and Acoustical Services Inc., acoustical treatment.

Others were: Southwestern Landscaping Christiansburg, landscaping & landscaping contractor; Montague-Betts Co., Inc., Lynchburg reinforcing; Gray Concrete Products, prestressed concrete; Owen Steel Co. of North Carolina, Inc., Gastonia, NC., steel supplier; Floyd F. Austin & Co., Natural Bridge Station steel erection; Snow Lumber Co., High Point, NC. millwork & wood doors; David G. Allen Co., Inc. Raleigh, NC. waterproofing & ceramic tile; Engineering Sales Co., Bristol, TN. metal doors & frames; and Winebarger Corp., Lynchburg courtroom seating.
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Roanoke Fire Station No. 6
Roanoke
Smithey & Boynton — Architect

Interior Design, Leslie Cheek • General Contractor,
Creative Construction and Development Corp.
Brick is a predominant element in the architecture of Roanoke City. From the Norfolk and Western shops to the new Poff Building, brick is exhibited in many forms. In the design of Roanoke City Fire Station No. 6, the architect has embraced that tradition.

The building is a tightly knit mass of low sculptural brick elements which are complementary to the tall, rounded brick hose tower that becomes the focal point of the structure. The sculptural effects of brick are exhibited in the fine detailing with a combination of corbeling and soldier courses encompassing the perimeter of the building elements. This contrasts with the bold, rounded surfaces of the columns at the main doors and the hose tower. The rich brown of the tere metal fascia unites with the brick earth tones of the building mass producing a harmonious melding of dissimilar materials.

Fire Station No. 6 is a prototype scheme that can be easily adapted to most environs. The client’s intent was to achieve a visual continuity among future fire stations. Each facility will have a similar design program, varying only in number of apparatus housed and personnel accommodated within the structure.

The architect’s solution is a compact arrangement of spaces consisting of three basic areas:

1. A core arrangement to house the station’s administration and living quarters.
2. A dormitory to provide sleeping quarters for the firemen and to allow for any increase in complement.
3. A 3-bay apparatus room that can be expanded readily to 4 bays. This is facilitated by means of a demountable wall.

Thus, the architect’s scheme is a viable solution to the present and future needs for such facilities throughout the City of Roanoke.

Creative Construction and Development Corp. of Roanoke was general contractor and handled foundations, concrete, steel roof deck, windows, carpentry, glazing and insulation.

Subcontractors & Suppliers
(Roanoke firms unless noted)

Joe Bandy & Son, Inc., excavating; Lovelace & Nowlin, masonry contractor; Webster Brick Co., Inc. and Lightweight Block Co., Inc., masonry suppliers; A-Steel Fabricators, steel; The Bonitz Insulation Co., Greensboro, NC, roof deck; Valley Roofing Corp., roofing; Hesse & Hurt, Inc., painting; and Skyline Paint & Hardware, Inc., weatherstripping & hardware.

Also, Acoustical Services, Inc., acoustical, plaster & resilient tile; Feather Tile Co., Inc., ceramic tile; South Roanoke Lumber Co., millwork; Roanoke Engineering Sales, Inc., steel doors & bucks; Cross Electric Co., Inc., lighting fixtures & electrical work; Johnston-Vest Electric Corp., plumbing fixtures and plumbing/air conditioning/heating/ventilating contractor; L. H. Sawyer Paving Co., paving; and Laurel Creek Nursery, Blacksburg, planting & seeding.
Glen Construction Co., Inc.

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Founded 1878
The Carpet House
Fredericksburg

Thomas Culbertson, AIA — Architect

Mechanical Engineer, Thomas Culbertson, AIA • Electrical Engineer, Thomas Culbertson, AIA • Structural Engineer, Advance Engineers • General Contractor, Leonard Bros., Inc. • Photography, Barry Fitzgerald.

The Carpet House, a Fredericksburg retail carpet store, moved from a decaying downtown area to a suburban location in June of 1979. The building is designed for marketing a product. Large windows display this product effectively by making it clearly visible to the motoring public, night and day.

Building cost was $24.00 per square foot for a 5,000 s.f. showroom and $17.00 per square foot for a 10,000 s.f. warehouse, which is attached to the showroom.

Since moving to the new facility, the firm's

(Continued on page 48)
Wood Products Research Center
VPI & SU, Blacksburg
VVKR Incorporated — Architect
The processing and pallet buildings are the first two of five in a Master Plan for a Forest Products Research Center. The Center represents the joint efforts and interests of the Forest Products Industry and university level education-research. Accordingly, the facilities have been planned to accommodate technical research of wood products and industrial processes as part of the University. They are designed to reflect a professional environment closely related to the industrial/business community.

The structures, which open into a demonstration courtyard, are contemporary examples of wood construction techniques and details. The facilities create a scale similar to that of a small industrial park with a professional and educational character developed through the use of fine wood and glass details. Both buildings separate office functions from research activities and provide easy access and supervision for a variety of laboratories. They are designed for specific testing procedures which require special temperature and humidity controls. Special considerations for structure and access requirements have been made to accommodate industrial materials movement.

The buildings utilize wood frame construction with wood/steel trusses, wood deck, and built-up roofing. The research, chemistry, and workshop areas are temperature and humidity controlled. Shielding of the exterior mechanical units within the building mass, exhibits control throughout the project. The use of glass mullions is a unique construction detail.

Creative Construction & Development Corporation, of Roanoke, was general contractor and handled foundations, concrete work, reinforcing, carpentry and specialties. The owner handled sodding, seeding, etc.

Subcontractors & Suppliers
(Roanoke firms unless noted)
Joe Bandy & Sons, excavating; Adams Construction Co., paving contractor; Atlantic Concrete, Blacksburg, concrete supplier; Structural Steel (Continued on page 44)
Dominion Bankshares Corporation, one of Virginia’s most prominent banking organizations and parent company of First National Exchange Bank, is anticipating a 1980 completion date for its new operation center expansion.

Located near Hollins in Roanoke County, this will be the third major expansion to a ten year old building program.

Citing the rapid growth in consumer banking services and Dominion Bankshares Corporation’s desire to remain a leader in the Virginia banking field, the building program called for four primary goals: early occupancy, maximum utilization of space, low initial cost and future expansion capabilities. When completed, the building will have 112,900 square feet of working space on four stories with provisions for an additional 112,900 future square feet. This is more than four times the 55,000 square feet of the initial complex.

Because of the client’s concern for construction delays and cost overruns, the project was developed on a fast-track approach. Overall project coordination was provided by The Design/Build Team Ltd. Every decision made was geared to fulfilling the program goals. The result was that thirteen weeks after the client gave the go-ahead for the project, the structural steel was completely erected.

The site is located adjacent to the rear of the existing complex. The building is constructed on control fill to match the floor elevations in the complex and to overcome some deficiencies in soil conditions. The grade is then sloped down in all directions to the parking areas thereby creating a buffer or berm all around the building. A covered walkway connects the new building to the rest of

Landscape Architecture, Byron R. Dickson, Architect
• Interior Design, Byron R. Dickson, Architect
• Mechanical Engineer, Branch & Associates
• Electrical Engineer, Lawrence E. Perry & Associates
• Structural Engineer, Richard L. Williams
• Project Coordinator, The Design/Build Team Ltd.
• General Contractor, Days Construction Co., Inc.
• Photograph, Byron R. Dickson, Architect.
e complex. By the orientation of the entrances
and the proximity of the building to the parking
areas, the new expansion becomes the main
employee entrance to the complex.
The structural system consists of concrete
foundations and structural steel in a composite
construction configuration. The building is 168
feet square and employs 24 by 28 foot bay spac-
ing. The composite construction allowed a re-
duction in total steel weight and reduced the
depth of the floor structure.
The exterior envelope employs metal building
panels on steel studs. Fenestration is provided
by aluminum panels in recessed bands both
horizontally and vertically on the building face.
Window openings are limited on the south and
west sides to diminish extreme environmental
influences. Two types of insulation are used
within the wall cavity.
Mechanical equipment consists of a variable
air volume chilled water system with gas fired
hot water heating for the building perimeter
and top floor.
Days Construction Co., Inc. of Salem is gen-
eral contractor.
Subcontractors & Suppliers
(Roanoke firms unless noted)
Joe Bandy & Sons, Inc., excavating; Valley
Steel Corp., Salem, reinforcing; Roanoke Iron &
Bridge Works, Inc., steel supplier; C. P. Buckner
Steel Erection Service, Inc., Chapel Hill, NC,
steel erection; Fabricated Metals Industries, Inc.
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FOR THE RECORD

Edward J. Mazur
Comptroller

Governor John N. Dalton announced, on January 4, the appointment of Edward J. Mazur of Richmond as State Comptroller, effective February 15. Vincent J. Pross, Jr., Deputy Comptroller, has been serving as Acting Comptroller. Presently Controller of Virginia Commonwealth University, a position he has held since July 1977, Mazur, prior to joining VCU, served as Assistant General Auditor for the University of Connecticut.

Mazur is a Certified Public Accountant and holds an MBA degree from the Wharton School of Business at the University of Pennsylvania and a BS degree in Mechanical Engineering from Rensselaer Polytechnic Institute.

Mr. Mazur is 37 years old and resides with his wife, Carol, and their three children in Bon Air.

T. Ashby Newby Retires

T. Ashby Newby, an employee of the Virginia Department of Highways and Transportation for more than 44 years and its director of administration since 1976, retires February 1.

Newby, 64, will be succeeded as director of administration by Joseph T. Warren, who joined the department in 1947, has been its Suffolk District engineer, and now is assigned as management services officer.

Newby is a native of Amelia County. He attended the Virginia Mechanics Institute in Richmond, the former Richmond Professional Institute, and the University of Richmond, and went to work for the Highway and Transportation Department as an engineering aide in 1935. He served subsequently as associate personnel officer, safety engineer and assistant purchasing agent. Then, for almost 20 years prior to his appointment as director of administration, Newby was the department’s chief purchasing agent.

He is a past president of the Virginia Association of Governmental Purchasing, and has been regional membership chairman for the National Institute of Governmental Purchasing.

In 1975, he was appointed by Governor Mills E. Godwin, Jr., to a negotiating team responsible for establishing contracts on electric rates with utility companies serving state agencies. More recently, he has been a member of the State Public Records Advisory Committee established by the General Assembly, and he was named last year to a task force studying the state government’s procurement laws.

His successor, Warren, is a 56-year-old native of Fauquier County. Warren received a bachelor of science degree in civil engineering from Virginia Military Institute in 1947, and joined the Highway and Transportation Department the same year as an engineering draftsman.

Among other assignments, Warren has been a secondary roads planning engineer, resident engineer, and assistant district engineer. As Suffolk District engineer, he headed the department’s operations in the Hampton Roads region from 1969 until his appointment as management services officer in 1976.

The Management Services Division which he has directed is responsible for internal management reviews and evaluations of the department’s operations.

As director of administration, he will provide overall supervision for that division as well as for the department’s Data Processing, Equal Employment Opportunity, Fiscal, Personnel, and Purchasing Divisions.

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Civil War Instruments
On Display
At Ft. Ward in Alexandria

• “Brass Bands and Battle Songs” opened at Fort Ward Museum in Alexandria on February and continues through the month of August. The exhibition includes sheet music, brass, percussion and woodwind instruments popular during the Civil War as well as a Cavalry musician's uniform.

During the Civil War music was used to extoll the virtues of heroes, herald victories and mourn defeats. Weary soldiers quickened their steps in time to “When Johnny Comes Marchin' Home.” “Tenting on the Old Camp Ground,” “Dixie” and “The Battle Hymn of the Republic” and other songs of moral and martial inspiration provided a soldier’s day. The blast of a cheer and the beat of a drum announced meals, wake-up and bedtime.

An estimated 14,000 band musicians served in 618 Union Army bands in 1862, at an expense of the government of nearly five million dollars. At times competition between bands was as fierce as rivalries between fighting units. Army units able to recruit the more famous bands were considered to be more prestigious. While the Union bands were numerous and better equipped—with B flat cornets, baritone horns, B flat bass tubas and other brass instruments—Confederate soldiers were just as dependent on their music for communications. An untold number could signal an approaching enemy, saving the lives of soldiers. General Robert E. Lee commented on the value of military bands in 1864 when he said, “I don’t believe we can have an Army without music.”

While the exhibition concentrates on brass bands and sheet music written for them, it also to a lesser extent, examines the contributions of the fife and drum corps and impromptu groups that formed at camps where no official band resided. An exhibition highlighting the Defenses of Washington 1861-1865 continues at Fort Ward and a lecture/concert series will run the second Sunday of each month through July at 3 p.m. Fort Ward was built in 1861 to protect Washington, D.C. from Confederate invasion. It received its name from Commander James Hamilton Ward, the first Union Naval officer killed in battle during the Civil War.

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34 VIRGINIA RECORD
Founded 1878
The Leonard Jed Company is pleased to announce the hiring of James A. Morrison as manager of the new Leonard Jed Company Richmond, Virginia branch, at 1727 Rhoadmiller Street. In October 1979 Mr. Morrison accepted a position to establish and manage the Leonard Jed Company. Richmond Virginia branch which will house a substantial inventory and have available the entire resources of industrial tools and supplies, contractors hardware, ferrous and non-ferrous fasteners, and builders supplies.

The Leonard Jed Company main offices are in Baltimore, Maryland; and, other branch offices include Philadelphia, Pennsylvania, York, Pennsylvania, Washington, D.C. and Pawtucket, Rhode Island.

Mr. Morrison was previously employed by John H. Frischkorn, Jr., Incorporated in Richmond as general sales manager. His duties included all outside sales, product review, inventory, advertising and sales production.

Prior to Frischkorn, Jim Morrison was sales manager for Variety Steel Fabricators in Cleveland, Ohio, and Vice President of Heat Machinery Corporation, also of Cleveland. He graduated from Ohio University in 1957 with a degree in business. He is married with three sons and a daughter.

The Leonard Jed Company welcomes Mr. James A. Morrison to their team; and they have every confidence that Mr. Morrison's knowledge and expertise will give their Richmond branch the proper foundation. The phone number of the new branch is (804)353-7891.

Developer Holds Covered Bridge Dedication

Mr. John J. Hanky, Jr., President of the JH Corporation announced the official dedication of its newly constructed Covered Bridge January 25, 1980. The uniquely designed rustic covered bridge, first of its kind in Henrico County, will span Stoney Run Creek connecting the nearly completed village of Crown Grant (off Pump Road) with the latest JH development to be appropriately named "Covered Bridge."

Henrico Delegate Bill Axelle headed the list of dignitaries and officials present and assisted Mrs. Susanne J. Hanky with the ribbon cutting ceremonies. Covered Bridge could be considered a "family affair" since Mrs. Hanky's father, J. Wallace Johnson, a structural engineer, designed the covered bridge; her father-in-law, John J. Hanky, Ill, Mrs. Hanky's husband, will be the prime builder of homes to be constructed in the new "Covered Bridge" area, in Richmond's far West End.

The wooden covered bridge has been completed with a convenient pedestrian walkway on one side. The dedication of this innovative covered bridge coincides with the opening of a completely new type of detached single family home. These design type homes, unlike any others in the greater Richmond area will be called "Concept II." The reason for the "II" is significant since the majority of the basic plans feature just two bedrooms. Concept II homes have a variety of richly traditional exteriors that Richmonders love to tell the Virginia Story.
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have favored through the years with the added features of screened porches, decks and flower rooms. The interiors have captured the elegance of the past and blended it with today's unique styling including deluxe full baths and corner fireplaces. Cathedral ceilings, working skylights, balconies and lofts are architecturally integrated with crown moulding, chair rails and other colonial trim to present a delightfully new appearance, one which Richmonders will find extremely fresh. The homes are selling in the mid seventies to one hundred thousand dollars.

The Concept II model has been completely furnished by The JJH Corporation utilizing nationally known interior design firm, Creative Design of Capitol Heights, Maryland. It is located off Pump Road adjacent to the Crown Grant Plantation Kitchen office in Richmond's West End.

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Manufacturing Developments in Virginia
Year 1979

Note: This report is compiled from information received from various state agencies, including the Virginia Department of Industry, Development, and Tourism. All information is obtained on a voluntary basis and no claim is made that the list is complete. This report is based on announcements of planned manufacturing capital expenditures; however, in some cases at the time of publication, some of these industries may be in operation.

Announcements of new and expanding manufacturing firms in Virginia for 1979 total 117, with anticipated employment of about 9,205. Forty-three of these announcements were for new plants with project employment of 5,193, while 74 were expansions of existing Virginia firms which will add 3,012 employees. When compared with statistics for 1978, 14 more announcements were made this year, and employment growth is about 1978 total of 9,133.

Industry in Virginia continues to expand in a stable, reasonably well-balanced way with 16 of the 20 Manufacturing Standard Industrial Classifications represented. The greatest anticipated employment growth is in non-electrical machinery (1,547); followed by chemical and allied products (1,420); fabricated metal products, except machinery and transportation equipment (1,200); and electrical and electronic machinery, apparatus, and supplies (1,022).

Some of the larger investments announced in 1979 were in non-manufacturing activities representing nearly $5 billion: a communications facility (Culpeper) $20 million; E. I. DuPont (Chesterfield) $200 million; Goodyear Tire and Rubber Co. (Danville) $71 million; Philip Morris Inc. (Richmond) $41 million; Ross Laboratories (Campbell County) $29 million; Burlington Industries (Pittsylvania County) $15 million and Masonite Corp. (Patrick County) multimillion. In total, manufacturing announcements listed in this report will represent an investment in Virginia which exceeds one-half billion dollars.

In addition to the manufacturing developments discussed so far, Virginia experienced considerable non-manufacturing locational activity in 1979. This activity includes operations such as wholesalers, distributors, administrative offices, research and development, etc. Some of the larger ones which we are aware of include: Sperry Division of Sperry Rand, a research and development facility (Fairfax County) 400 people and S.W.I.F.T., a telecommunications facility (Culpeper) $20 million investment. We are aware of 17 non-manufacturing activities representing nearly $50 million in investments and over 1700 in employment.

The map above vividly shows the geographic dispersal of the new and expanding facilities in Virginia. This map includes manufacturing and service firms in finance, insurance, real estate, and public utilities. The map is based on announcements from the Virginia Department of Industry, Development, and Tourism, and is subject to change. The map is subject to change and may not include all activities.

HOW Takes New Dimension

• Paul Fouche has been hired as Inspection Services Director by the Home Owners Warranty Corporation (HOW) of Northern Virginia.

HOW of Northern Virginia is a wholly-owned subsidiary of Northern Virginia Builders Association. Home Owners Warranty is a 10-year buyer protection plan protecting homeowners against defects in material and workmanship.

"Mr. Fouche will be responsible for the inspection of HOW homes in Northern Virginia," said Bruce C. (Dusty) Rhoads, president of HOW of Northern Virginia. "This inspection will be done as a service to the community. By deciding to hire Mr. Fouche, the HOW board of directors has branched into a new dimension and become the first HOW council in the state to offer this service in a greater effort to guarantee the public quality control."

Mr. Fouche previously served six years in the Fairfax County Building Inspection office, most recently as assistant to the chief building inspector. He anticipates visiting each HOW subdivision four times each year. Inspections will monitor compliance with local building codes and assist builders in the area of quality control. Mr. Fouche will meet with the project superintendent and view all phases of construction.

Paul Fouche is a native of Falls Church with a B.S. degree from Middle Tennessee State University. He currently resides in Clifton, Va. with his wife Nedra and their two sons, Jonathan, 10 and Jason, 7.

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February 1980
Insulating: It's Never Too Late To Save A Little Money

- Forget about inflation. Forget about the ever-increasing cost of home heating fuel. Just think about last winter’s heating bills. They may not have been too onerous, but wouldn’t it have been much nicer if they had been 25 percent smaller?

Last year’s bills can be forgotten now, but the current year’s and future heating bills are coming up and they aren’t going to be any smaller. You can, however, take a few preventive steps to minimize the impact of the increase. Although there are a variety of different courses you can take, they can be summarized in one ubiquitous word: insulate.

By correcting the single greatest cause of energy waste in most American homes, inadequate insulation, the average person can save between 20 and 30 percent of the energy used to heat the home in winter and about 10 percent of summer cooling energy. Those figures also make it worthwhile to spend a little time learning the basics of insulation.

Insulation is necessary in homes because heat flows from an area of higher temperature to an area of lower temperature. In the winter, you want the heat to stay inside; in the summer, you want to keep it outside. Proper insulation helps maintain this relationship and prevents squandering energy on thermal control.

Heat transfer occurs not only between inside and outside, but also between thermally controlled areas and those not so controlled, such as attics, garages, and basements. Most people are aware of air infiltration through such openings as leaks around doors and windows. These leaks can often be controlled by caulking or weatherstripping. But many people are unaware of air flow through the building “envelope,” the roof, floors, and walls. Good insulation can prevent this kind of air seepage.

Many factors determine whether or not your insulation is sufficient — the climate in which you live, the amount of insulation already in place, the number and size of windows and doors, and the attic area in relation to the wall area of the house. These and other factors combine to determine the “R-value” of insulation necessary for your house. The R-value is a function of both the type and thickness of material used. The higher the R-value, the better the insulation.
R-value, the greater the resistance to heat flow. The proper R-values for the different areas of your house (and they must be measured separately) can be determined in consultation with an insulation contractor, architect, or engineer. And the R-values of materials used, whether by a contractor or a do-it-yourselfer, should be marked on all packaging.

Aside from the more obvious windows/doors/ttalic heat flow potential, some other areas for close inspection might include:

* Water Heater. Its temperature should not have to be above 120 degrees (Fahrenheit); the heater itself can be wrapped with insulation to reduce the rate of heat loss. Bottom sediment should be drained out each year.

* Heating and air conditioning ductwork. If the ducts run through attics or crawl spaces, they should be insulated. They should also be checked for loose joints, split seams, and other leaks.

* Fireplace. Does the damper fit well and close snugly? If not, it might be economical to install a glassdoored fire screen. Chimneys must be kept clean for maximum efficiency and safety; there are also available piped, blower-type devices which recapture much of the heat which normally escapes up the chimney.

* Furnace. The efficiency of this system should be checked by a professional; aside from the regular cleaning and adjustments, many furnaces can benefit from installation of certain new devices, like automatic flue dampers, fan switch controls, and heat exchanger pipes.

* Basement. It may be necessary to insulate the house foundation walls to protect water pipes and make the basement liveable. Having found out about R-values and made a close inspection of your house to determine if it measures up to the recommended levels of insulation, you can then decide whether or not you need added insulation and, if so, whether you or a professional should do it. Generally speaking, insulation installation in masonry houses should be left to the pros. Wood frame houses offer a variety of challenges to the do-it-yourself insulator, from the determination of what materials will best achieve the proper R-value to moisture control through the use of vapor barriers and proper ventilation. And in certain areas of wood frame houses where "blown" insulation is the only answer, the services of a professional will be required. This is a particularly difficult job for the layman to oversee properly, so qualified contractors who guarantee their work must be sought.

To help sort out some of the confusion, to fully explain R-values and how they apply to your area, and to help narrow the field of alternatives, your architect or contractor can suggest sources of further reading.

It is an area well worth spending some time investigating, for the end result of your studies could be extremely valuable savings on next year's home heating and cooling bills.

(Article courtesy of The American Institute of Architects, Washington, D.C.)
Inflation/Recession

(From page 5)

rather than discourage this kind of involvement on the part of business and private citizens well. We must do something about the over-regulation by Government—Federal, State and Local—which hampers business. Government regulation has permeated into every sector of the economy and in many cases does nothing but raise costs and fuel inflation. We must also have a more substantial program on the part of the Federal Government to foster and encourage the development and use of alternate energy sources.

While the cyclical slowdown in construction begun in 1979 and continuing into 1980 may ease building costs in 1980, those costs will remain high far into the future. While tight money and fiscal measures may contend with inflation, they will not cure the ills that face the development industry. These existing policy options are ineffective and the effective options outlined above appear to be politically unacceptable, but they must be implemented if we do not want to continue our current situation well into this new decade.

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and assembly space, thus achieving maximum
use of space. The library, or resource center, is
catered in the hub of the school’s circulation
pattern to maximize the exposure of students to
learning resources. Classrooms are paired
with movable partitions between to offer flexi-
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(See list at the back of this issue)

<table>
<thead>
<tr>
<th>Hicks &amp; Ingsl Co. of Virginia, Inc.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Contractors</td>
<td>Electrical Contractors</td>
</tr>
<tr>
<td>St. Reg. #6805</td>
<td>FREE ESTIMATES</td>
</tr>
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</tr>
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</tr>
<tr>
<td>Phone 583-0143</td>
<td>Lighting Fixtures—Electric Heat</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Boschen Masonry, Inc.</th>
<th>Wiley N. Jackson Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masonry Contractor</td>
<td>General Contractor</td>
</tr>
<tr>
<td>St. Reg. #9454</td>
<td>St. Reg. #10013</td>
</tr>
<tr>
<td>P.O. Box C</td>
<td>Roads — Bridges — Site Work</td>
</tr>
<tr>
<td>ASHLAND, VA. 23005</td>
<td>Phone 703-389-0251</td>
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<td>Phone 798-6551</td>
<td>1645 Apperson Drive, Salem, Virginia</td>
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Richmond Medical Park
(From page 15)

Medical office space, some wintertime overrating from the low-angle east and west sun was experienced; this was corrected by use of film.

The mechanical system is variable air volume system, with local supplementary electrical heat. The selection of this system came about from consideration of the degree of control needed for the many different types of space use and orientation. During construction the project was purchased by the Equitable Life Assurance Society and the project is now over 80% rented; consideration of phase II is underway.

Taylor & Parrish, Inc. of Richmond was general contractor and handled carpentry.

Subcontractors & Suppliers
(Richmond firms unless noted)

Also, N. W. Martin & Bros., Inc., built-up roof & other roofing; Allied Glass Corp., glazing contractor; Pleasant Hardware, hardware supplier; F. Richard Wilt, Jr., Inc., Ashland, gyp- 
mum board contractor; O’Ferrall, Inc., acoustical treatment & resilient tile; Hungerford, Inc., plumbing/ventilating/air conditioning contractor; and Varina Electric Co., Inc., electrical contractor.

J. W. Bastian Co.
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St. Reg. #4932
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Chesapeake, Va. 23324

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Telephone 232-2161
St. Reg. #2812

Capital Mechanical Contractors, Inc.
St. Reg. #6290
Commercial—Industrial
Phone 329-8400
208 East Brookland Park Boulevard, Richmond, Va.

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2614 W. Cary St., Richmond, Va.

Wood Products Research Center
(From page 29)

Also, Harmon Ceiling & Partition Co., gypsum board contractor, acoustical treatment & resilient tile; DeHart Tile Co., Inc., Christiansburg, ceramic tile; The Carpet Village, carpet; Devoe & Raynolds Paint Center, paint supplier/manufacturer; American Air Filter Co., Inc., Richmond, dust collector, Magic City Sprinkler, Inc., sprinkler contractor; Kohler Plumbing Products, Norfolk, plumbing fixture supplier; Air-O-Matic, Inc., plumbing/heating/ventilating/air conditioning contractor; Varney Electric Co., Inc., Roanoke electrical contractor (Widelite/Daybrite lighting fixtures); and Square D Co., electrical equipment supplier.

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Index to Advertisers

-A-
-able Equipment, Inc ................................................. 40
corn Construction Co. Ltd ........................................... 44
merican Furniture & Fixture Co., Inc .......................... 36
Anderson & Cramer, Inc .............................................. 34
ndrews Large & Whidden, Inc ....................................... 4
lington Woodworking & Lumber .................................... 40
oyd F. Austin & Co ...................................................... 23

-B-
aley-Spencer Hardware Co., Inc .................................... 4
e Bandy & Son, Inc ...................................................... 23
. Bastian Co ................................................................. 43
odner & Manuel, Inc .................................................... 35
 Schen Masonry, Inc .................................................... 41
. W. Boxley & Co ......................................................... 40
uckingham-Virginia Slate Corp ..................................... 48
ex Burner ................................................................. 6

-C-
the Walter E. Campbell Co., Inc .................................... 42
ipital Concrete, Inc ...................................................... 35
ipital Masonry Corp .................................................... 38
ipital Mechanical Contractors, Inc ................................. 43
ates Building Specialties, Inc ...................................... 23
edar Roofs of Richmond, Inc ......................................... 38
entral Electrical Service Corp ....................................... 45
esapeake Masonry Corp ............................................... 33
esapeake Partition, Inc ................................................ 43
. Cline & Son, Inc ....................................................... 6
ichran Construction Co ................................................. 42
crete Repair Specialists ................................................ 42
tractor Paving Co., Inc ............................................... 42
avicon C. Cowherd, Inc ................................................ 42
iative Construction & Development Corp ....................... 4
. Creech, Inc ............................................................... 4
. Crosby ................................................................. 43

-D-
The Danville Lumber & Manufacturing Co ...................... 26
. C. Dean Electrical Contractor, Inc ................................ 35
ean's Steel Erection Co., Inc ................................. 23
ickerson & Trent ......................................................... 38
ominion Elevator Co .................................................... 38
m. Doolan Services, Inc ............................................... 4
. C. Driskill, Inc ......................................................... 11
. Driver & Co .............................................................. 47

-E-
. T. Eley, Jr ................................................................. 45
. W. Enochs, Inc ........................................................ 39
. B. Eurell Co ............................................................... 42
. E. Evans & Son Construction Co ................................. 39

-F-
Fabricated Metals Industries, Inc .................................. 31
. T. Frick Co., Inc ........................................................ 43
roehling & Robertson, Inc ............................................. 4
ultz Lumber & Building Supply Co ................................. 37

-G-
ax Plumbing & Heating Co., Inc ................................... 38
eneral Shale Products Corp ......................................... 39
 Glen Construction Co., Inc ......................................... 26
aves Construction Co., Inc ......................................... 23
gray Lumber Co .......................................................... 11
Gregory Construction Co., Inc ..................................... 38
. T. Gresham Co., Inc .................................................. 11

-H-
& H Supply Co., Inc ..................................................... 44
. R. Hall, Jr ................................................................. 26
 Hamilton's Floor Fashions & Tile, Inc ........................... 31
anover Fabricators ..................................................... 33
omas Harris & Co., Inc ................................................ 34
. Wm. Hartman, Inc ..................................................... 36

Central Electrical Service Corp.
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