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EDWARD A. SMITH. III

of the PUBLIC RELATIONS COMMITTEE

VIRGINIA SOCIETY, AIA

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to tell the Virginia Story

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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.)



Founded 1878

nflation/Recession

To all outward appearances there were no signs of construction industry recession in the Fall of 979 as a record dollar volume of work in progress was being completed. Partially obscured by this rong showing but visible upon scrutiny are the signs that the four-year-long expansion of the enstruction cycle was running out. In point of the fact, this year's nine percent gain in value of instruction completed is all inflation as the physical volume of work was less than in 1978, and to ake things worse the value of new work being started hit its high in the first quarter of 1979 and

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

While the move of the Federal Reserve Board, which began construction industry decline early in 79, 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 painst foreign currencies because foreign markets have no confidence that we can do something to alt inflation. So, even though it has been an unpopular move, the Government's tightening of money pplies was necessary to strengthen foreign confidence in our economic policies, to strengthen the llar on international markets and, most importantly, to curb inflation before it runs away from us nd sends us into a deep recession.

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

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

We need, therefore, a long-range solution to the inflation/recession problem, a solution which es beyond tight money supply. A great deal more solution is needed if we are to achieve a more able, more predictable economic climate. For now, there may have been no other choice than to ueeze the money supply because of the urgency of our problem. But this harsh step will be for ught and the construction industry's hardships will count for nothing if fiscal measures alone are pected to halt runaway inflation. There are too many other factors fueling inflation and a lot more rong medicine is needed. We must develop a national energy plan. Intermittent bursts of double git energy cost increases during the 1970s have become built into the steadily rising base rate of flation and have struck with particular impact on the construction industry. Without some tional plan we are at the mercy of the OPEC Nations. Their price increases boost the rate of flation, widen the gap in the balance of payments and further weaken the dollar. We must put a lid deficit spending which expands the money supply without a corresponding productivity growth. e Federal Government controls better than thirty percent of the economy. Merely stopping pansion of Federal bureaucracy is not sufficient, they must be cut back. We must have more centives for investment in the future. Tax policies must be revised to encourage investment in new cilities, new equipment and new technology. (Continued on page 40)

By Frederick E. Baukhages, IV, AIA

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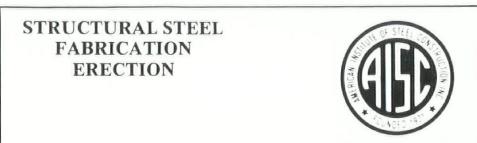
VIRGINIA SOCIETY AMERICAN INSTITUTE OF ARCHITECTS

AIA Elects Nine Honorary Members

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;





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—Paul Mellon, business and foundation exec tive/philanthropist, who, as president of th National Gallery of Art and chairman of its built ing committee, has made "design excellence the highest order possible in a building"—th gallery's East wing, designed by I. M. Pe FAIA—"dedicated to serving the cultural need of diverse peoples. ..." said his nomination; —Maria Fay Murray, director of the AIA award programs for 15 years, who has served variou Institute programs with "the fullest measure professional concern and conscientiousnes perserverance for fairness, quality and proce ural continuity and consistency that the juryin and premiating process should entail," according to her nomination;

—Walter F. Pritchard II, director of consultir architecture and engineering for Southern Ca fornia Edison Co., who has worked with Al chapters to develop the practical application energy conservation techniques to architectur design;

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

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

—Mary Chapman Smith, executive director of the Arizona Society/AIA since 1975 and forme executive secretary of the Central Arizona Chapter/AIA, whose professional administrative abi ity and leadership have inspired all AIA comporents;

—Mrs. Gerald H. (Katie) Westby, national organizor for the arts and humanities and Tulsa civileader, who has provided leadership to make the arts and architecture a central part of liand who has been instrumental in legislatio requiring one percent of capital expenditures be committed to the arts.

Selected by the AIA Jury for Honorary Men bers, the nine individuals will receive the honorary memberships during the AIA nation 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 James River Chapter

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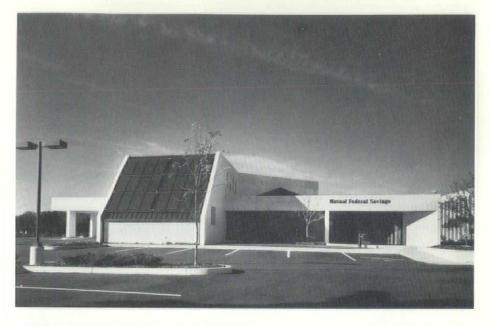


Mutual Federal Savings & Loan Association Home Office, Norfolk

Williams and Tazewell & Associates, Inc. — Architect

Mechanical Engineer, Vansant & Gusler • Electrica Engineer, Vansant & Gusler • General Contractor, E. T Gresham Co., Inc. • Photography, Lawrence S. Wil liams, Inc.





Mutual Federal Savings and Loan is unique in everal ways. Situated in the heart of the redeelopment area in downtown Norfolk, its design corporates solar energy and natural lighting s well as several other unusual features. Wilams and Tazewell Architects responded to an cciting challenge.

Joseph L. Weller, President and Chairman of Board of Mutual Federal explains— "When the Norfolk Redevelopment and

"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.

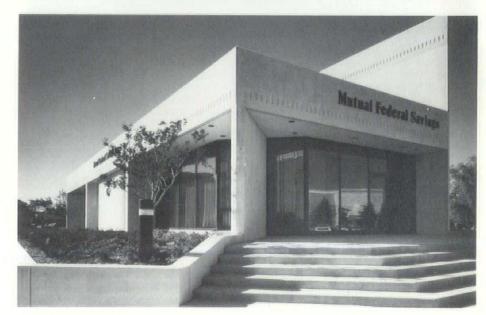
Our site considerations included convenience in relation to our old home office, and one which had ready and safe access traffic wise.

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 nportance to Williams and Tazewell, the archicts for the project. The firm has interior esigners and engineers as well as architects





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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 build in the early 1900s 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 juts above. This large glass area also acts to tie together the one-story street side with the twostory 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 loveliness 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 ambience 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." E. T. Gresham Company, Inc. of Norfolk wa general contractor and handled pile driving. Subcontractors & Suppliers

(Norfolk firms unless noted)

Ferrell Linoleum & Tile Co., Inc., Travertin Marble setting; Colonna & Co., Inc., NY, Trave tine Marble material; Dover Elevator Co., eleva tor; J. C. Driskill, Inc., Virginia Beach, electrica Norfolk Iron Works, structural steel; E. K. Wilso & Sons Plumbing & Heating, Inc., plumbing Ames & Webb, Inc., grading & asphalt paving Potter Construction Corp., concrete islands curb & sidewalk; Anchor Fence Div., Anche Post Products, Inc., chain link fencing; Econom Cast Stone Co., Richmond, precast concret Construction Specialties, Inc., Cranford, N. Iouvers; Shaw Paint & Wall Paper Co., Inc painting; Febre & Co. of Norfolk, Inc., insulatio & drywall; Ferrell Linoleum & Tile Co., Inc acoustical tile; and Door Engineering Corp., fir ish hardware, hollow metal doors & frames.

Also, Howard E. Marguart & Co., toilet part tions (Fiat, Long Island City, NY); Baker & Co heating/ventilating/air conditioning contract tor; Commonwealth Masonry, set precast mas onry; Grover L. White, Inc., ceramic & resilier tile; Gresham Metal Buildings Co., Inc., meta roofing; Eastern Roofing Corp., built-up roo PPG Industries, Inc., glass, glazing & skyligh Elliot & Co., Inc., Tarboro, NC, millwork cabinets; Kitchen Towne, Div. of Town Distribu tors, kitchen cabinets; Owen Pattern Foundry Mfg. Co., Inc., bronze thresholds; Capital Cor crete, Inc., concrete; Lone Star Industries, Ind concrete; Eppinger & Russell Co., Chesapeak piles; Hall-Hodges Co., Inc., reinforcing steel; V. Williams Co., Inc., Virginia Beach, fill mate rials; Read Steel Co., Inc., Chesapeake, place tie reinforcing; and Palmer Cherry, Portsmouth concrete finishing.

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W. W. Gordon Elementary School

Chesterfield County

Moseley-Hening Associates, Inc. — Architect



Energy conservation was a major thrust in the esign of the W. W. Gordon Elementary School. Vith the aid of engineering consultants, Hanins and Anderson, Inc., of Richmond, MHA, Inc. nalyzed the costs and pay-back periods, in nergy savings, of numerous building compoents. A solar heating system for building heatng was rejected because of high initial costs nd too long an amortization period, but the ollowing energy saving features were accepted or construction:

olar Hot Water Heating is provided by a flat-plate, ir-to-water solar collection system;

arthen Berms are graded against exterior walls p to window height to provide natural inulation;

hading of Windows is accomplished by deep verhangs on sides of the building receiving irect sun. This reduces heat gain on walls and vindows from solar radiation, reduces glare, nd thus lowers artificial lighting levels nornally needed to combat glare from outside; ouble Glazing of Windows and Extra Insulation in

valls and roof also reduce heating and cooling bads. Particularly poteworthy is the fact that there

Particularly noteworthy is the fact that these nergy-saving features were achieved in a contruction bid of less than \$34.00 per square (Continued on page 41)





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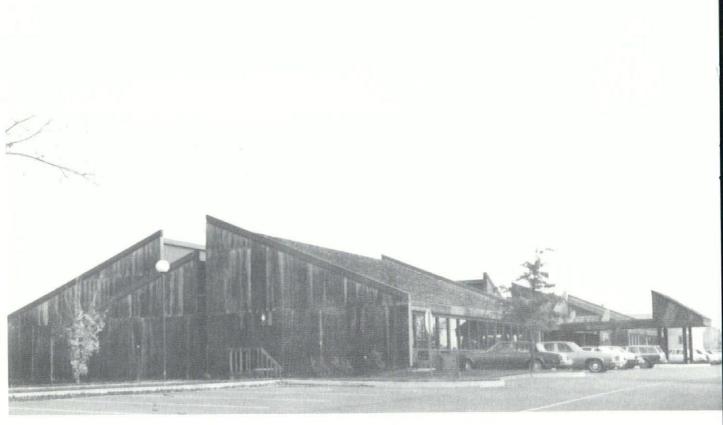


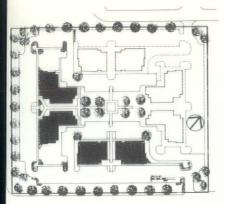
Richmond Medical Park

Richmond

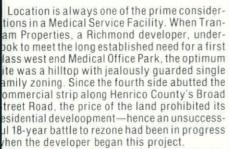
Jones & Strange-Boston — Architects/Engineers

Landscape Architect, Kenneth R. Higgins • Mechani cal Engineer, Jones & Strange-Boston • Electrica 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. • Photo graphy, Bruce M. Justice, AIA.





ite Plan



The concept was developed by the architect to naintain residential scale and materials and ninimize traffic interference with the quiet eighborhood streets. On this basis the site was uccessfully rezoned and the project moved orward in its first phase to construction (60,000 quare feet of building area).

Economic land use required 120,000 square et of building area, which created conflicts with the residential scale commitment to the eighbors. The solution adopted was to excaate the hilltop to a sunken courtyard so that wo-story buildings could be used, with grade evel entry to each floor, reasonable building eparation for scale, and a low profile as seen rom the surrounding residential area. The project was divided into eight buildings,

The project was divided into eight buildings, which allowed a stimulating mix of volume, rientation and spatial relationship to the other upportive areas in the park. Parking is close to ive cars per 1000 square feet (well above the ounty minimum) and is linked visually to the uildings by the strongly accented "pick-up oint" shelters between each pair of buildings. Untreated redwood plywood furred over con-

Untreated redwood plywood furred over conrete masonry was chosen for the exterior walls is a result of life cycle cost studies. Weathering of the wood is proceeding well, with the interestng variegations in color now evident on the way o 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 late. Due to the small subdivisions inherent in (Continued on page 43)







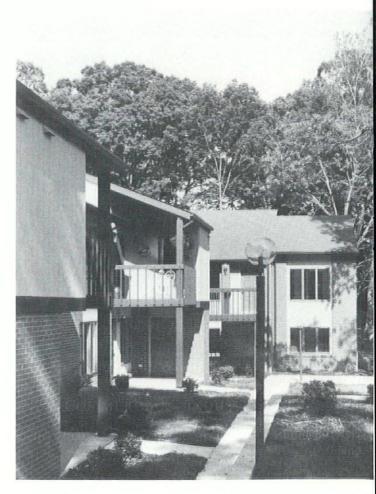
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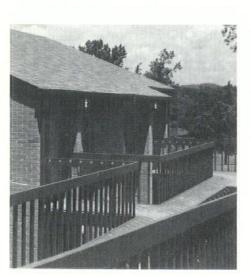


New Apartment Facility The Methodist Home, Roanoke

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 Engi neer, Richard L. Williams • General Contractor, Q. M Tomlinson, Inc. • Photography, Byron R. Dickson Architect.



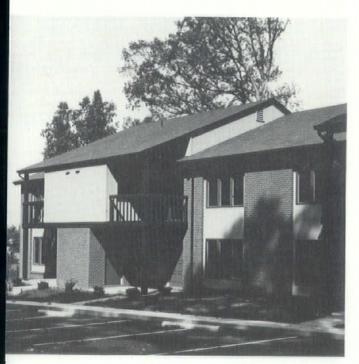


In late Spring of 1979, The Methodist Home in Roanoke began occuncy of their new twelve unit apartment facility. This project represents e Home's commitment to accommodate the ever increasing demand for tirement housing

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

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

Occupants of this apartment project are eligible to utilize the medical cilities of the Roanoke Methodist home and may transfer their residence 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;

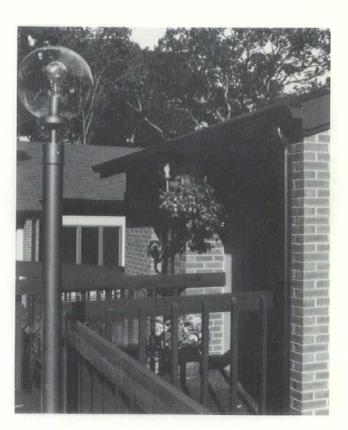
Minimize the effort required for housekeeping activities: Careful avoidance of an institutional look

Q. M. Tomlinson, Inc. of Roanoke was general contractor. Subcontractors & Suppliers

(Roanoke firms unless noted)

Joe Bandy & Son, Inc., excavating; S. R. Draper Paving Co., Inc., paving contractor; Concrete Ready Mixed Corp., concrete supplier; Thompson Masonry Contractor, Inc., Salem, masonry contractor; Valley Steel Corp., Salem, steel supplier; and Timber Truss Housing Systems, Inc., Salem, structural wood.

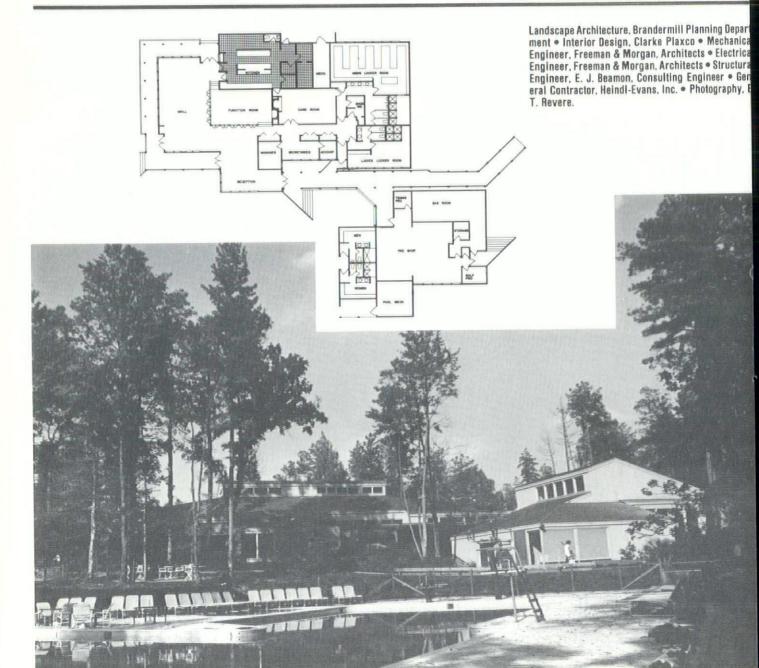
Also, South Roanoke Lumber Co., millwork, wood doors & windows; Skyline Paint & Hardware, Inc., hardware supplier; James E. Lyle, Jr., plaster contractor; National Buying Service, resilient tile; Elmer M. Jones Painting & Decorating, Salem, painting contractor; Dickerson-Trent, Inc., plumbing contractor;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





Brandermill Country Club

Freeman & Morgan — Architects





Brandermill, a design oriented community in Chesterfield County has ust 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 nto 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 ane gon 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)

Lone Star Industries, Inc., concrete supplier; A. T. Scruggs Masonry, Ashland, masonry contractor; Hanover Iron & Steel, Inc., Ashland, steel supplier & miscellaneous metal; Hanover Fabricators, Ashland, structural wood; H. Beckstoffer's Sons, Inc., millwork; E. S. Chappell & Son, Inc., caulking; and Southern Insulators, Inc., roof & wall insulation. Also, PPG Industries, Inc., glass; Joseph F. Presioso, gypsum board contractor; Oliva & Lazzuri, Inc., ceramic tile; Sears, Roebuck & Co., carpet; Costen Floors, Inc., wood flooring; M. P. Barden & Sons, Inc., painting contractor; E. T. Long, Inc., pre-fab fireplaces; James G. Thayer, toilet partitions; Bates Co., Inc., lockers; Douglas Aquatics, Inc., swimming pools; Worsham Sprinkler Co., Inc., Ashland, sprinkler contractor; Triangle Plumbing & Heating, Inc. plumbing contractor; James River Trane, Inc., heating/ventilating/ air conditioning contractor; and B & T Electric, electrical contractor.





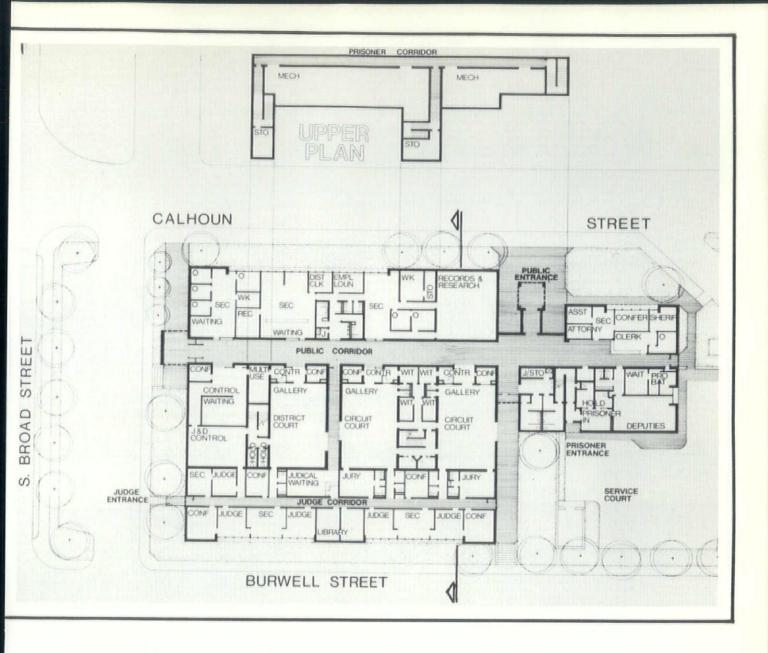


City of Salem Courthouse Salem VVKR Incorporated – Architect

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.



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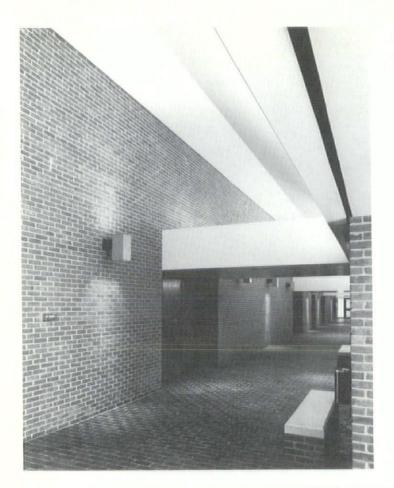


The plan of the new Salem Courthouse reguates a variety of complex and exacting funcions which include public, prisoner, witness, udicial and law enforcement activities. The building, designed by the Roanoke office of VKR Incorporated, meets the demands of the program by providing separate circulations systems that insure the security of all groups nvolved.

The expandable, linear building has one enrance 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 courtrooms directly below.

The Courthouse, which received an honorable mention ward 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 dra matic effect to exterior elevations. The mechan ical system employs and energy efficient, central water-to-air heat pump.

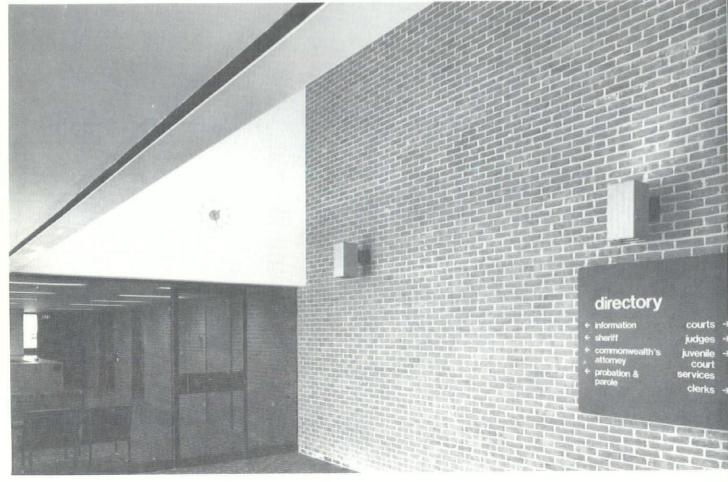
Graves Construction Co., Inc., of Blacksburg was general contractor.

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 Build ing 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 me tal; 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; Montaque-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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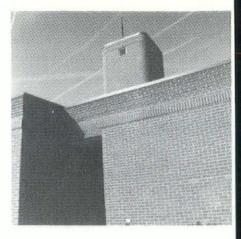
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to tell the Virginia Story

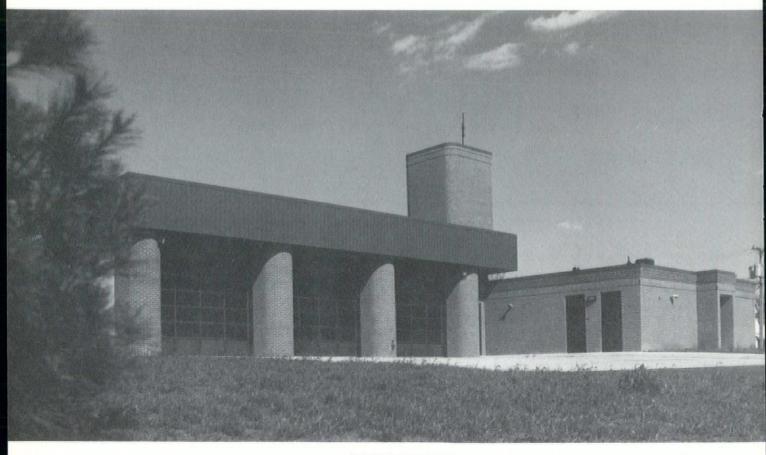
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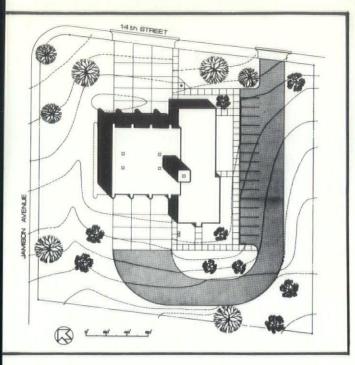


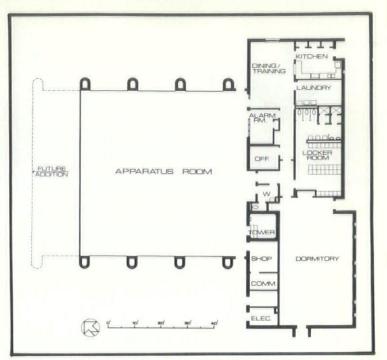
Roanoke Fire Station No. 6 Roanoke

Smithey & Boynton — Architect

Interior Design, Leslie Cheek • General Contractor. Creative Construction and Development Corp.







lite Plan



Brick is a predominant element in the archiecture of Roanoke City, From the Norfolk and Western shops to the new Poff Building, brick is exhibited in many forms. In the design of Roatoke 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 complenentary 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 terne 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:

- A core arrangement to house the station's administration and living quarters.
- A dormitory to provide sleeping quarters for the firemen and to allow for any increase in complement.
- 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; Al-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.



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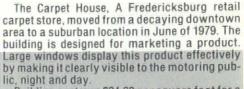


The Carpet House

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.



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.

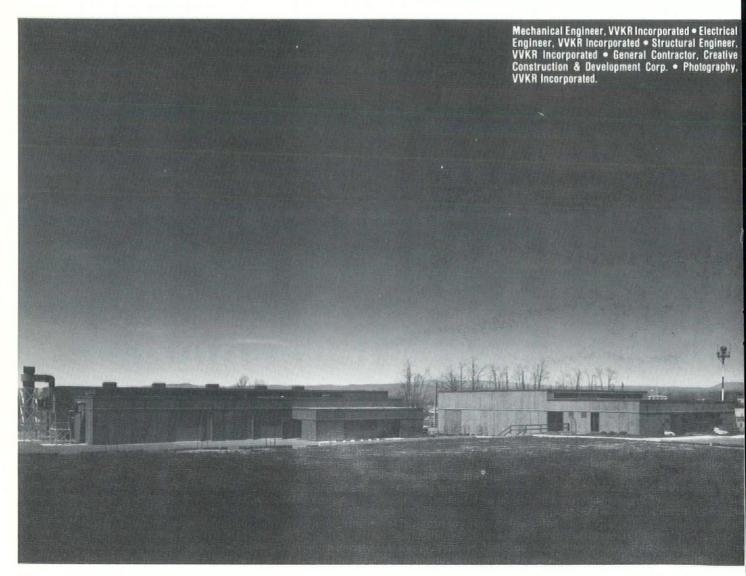
Since moving to the new facility, the firm's (Continued on page 43)

to tell the Virginia Story



Wood Products Research Center VPI & SU, Blacksburg

VVKR Incorporated — Architect



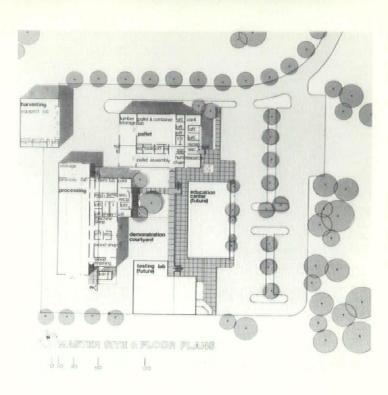
The processing and pallet buildings are the first two of five in a Master an for a Forest Products Research Center. The Center represents the joint forts and interests of the Forest Products Industry and university level lucation-research. Accordingly, the facilities have been planned to commodate technical research of wood products and industrial prosses as part of the University. They are designed to reflect a profesonal environment closely related to the industrial/business community. The structures, which open into a demonstration courtyard, are conmporary examples of wood construction techniques and details. The cilities create a scale similar to that of a small industrial park with a ofessional and educational character developed through the use of fined wood and glass details. Both buildings separate office functions om research activities and provide easy access and supervision for a ariety of laboratories. They are designed for specific testing procedures hich require special temperature and humidity controls. Special considations for structure and access requirements have been made to commodate industrial materials movement.

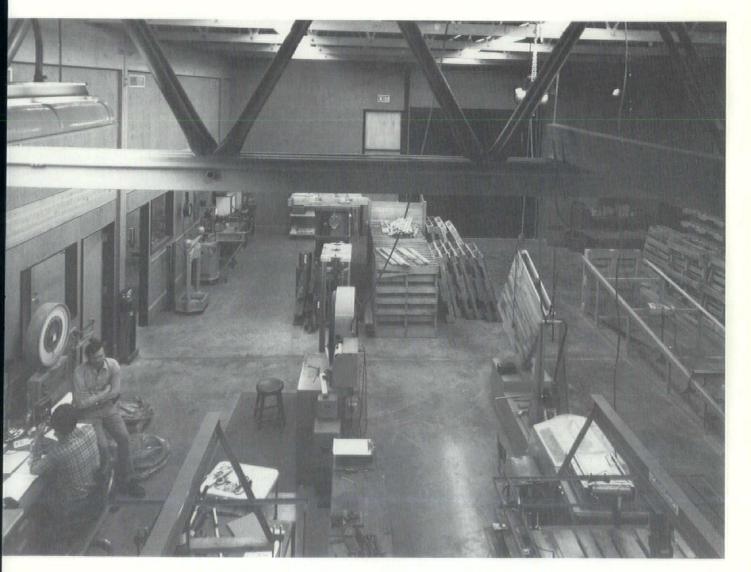
The buildings utilize wood frame construction with wood/steel trusses, ywood deck, and built-up roofing. The research, chemistry, and worktop areas are temperature and humidity controlled. Shielding of the terior mechanical units within the building mass, exhibits control roughout the project. The use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

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

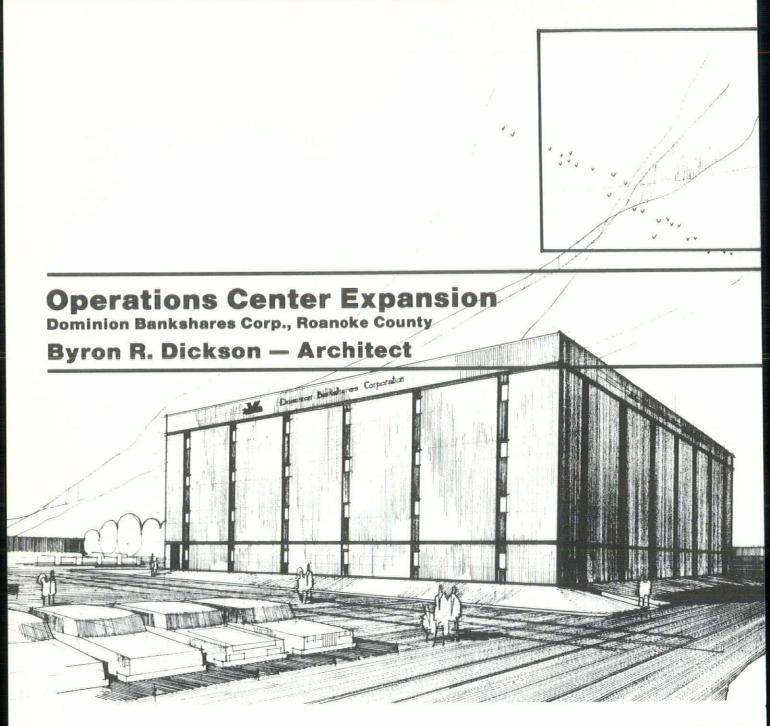
Subcontractors & Suppliers (Roanoke firms unless noted)

Joe Bandy & Sons, excavating; Adams Construction Co., paving conactor; Atlantic Concrete, Blacksburg, concrete supplier; Structural Steel (Continued on page 44)





to tell the Virginia Story



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, Archite • Interior Design, Byron R. Dickson, Architect Mechanical Engineer, Branch & Associates • Electr cal Engineer, Lawrence E. Perry & Associates • Stru tural Engineer, Richard L. Williams • Project Coord nator, The Design/Build Team Ltd. • General Co tractor, Days Construction Co., Inc. • Photograph Byron R. Dickson, Architect. e complex. By the orientation of the entrances nd the proximity of the building to the parking reas, the new expansion becomes the main nployee entrance to the complex.

The structural system consists of concrete undations and structural steel in a composite pnstruction configuration. The building is 168 et square and employs 24 by 28 foot bay spacg. The composite construction allowed a reuction in total steel weight and reduced the epth of the floor structure.

The exterior envelope employs metal building anels on steel studs. Fenestration is provided y aluminum panels in recessed bands both orizontally and vertically on the building face. Vindow openings are limited on the south and vest sides to diminish extreme environmental nfluences. Two types of insulation are used within the wall cavity.

Mechanical equipment consists of a variable ir volume chilled water system with gas fired oiler hot water head for the building perimeter nd top floor.

Days Construction Co., Inc. of Salem is genral 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: Fabricated Metals Industries, Inc., teel erection; Fabricated Metals Industries, Inc., niscellaneous metal; Dover Elevator Co., Greensboro, NC, elevators; Branch & Associates, Inc., plumbing/heating/ventilating/air conditioning contractor; and Newcomb Electric Co., Inc., electrical contractor.



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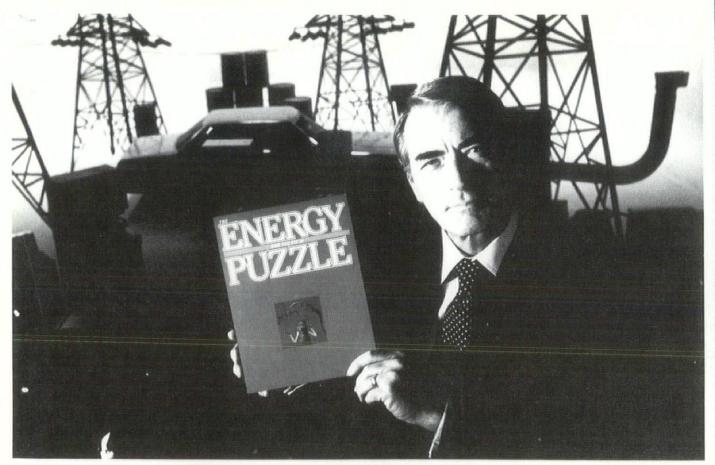


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February 1980

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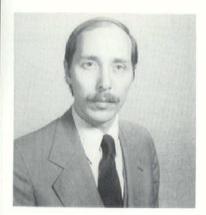
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FOR THE RECORD —



EDWARD J. MAZUR Comptroller

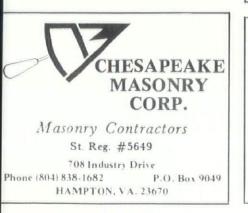
lew State Comptroller

Governor John N. Dalton announced, on Janury 4, the appointment of Edward J. Mazur of ichmond as State Comptroller, effective Febuary 15. Vincent J. Pross, Jr. Deputy Comproller, has been serving as Acting Comptroller. Presently Controller of Virginia Commonvealth University, a position he has held since uly 1977, Mazur, prior to joining VCU, served as fanager in the Federal Government Division of he American Institute of Certified Public Acountants and as a managerment consultant nd audit supervisor with the international pubc accounting firm of Coopers and Lybrand. He as also served as supervisor of marketing nancial analysis with the Winchester-Western ivision of OLIN Corporation.

Mazur is a Certified Public Accountant and olds an MBA degree from the Wharton Gradute Division of the University of Pennsylvania nd a BS degree in Mechanical Engineering from he University of Connecticut.

As Comptroller, Mazur will report to Charles As Comptroller, Mazur will report to Charles Walker, Secretary for Administration and inance, and will be responsible for developing ccounting and financial management policy and supporting systems for the state and its gencies. The State Comptroller's Office also repares state financial reports and processes ayrolls and other disbursements for state gencies.

Mr. Mazur is 37 years old and resides with his vife, 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 1978, 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.

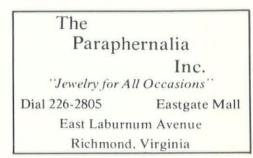
He is a past president of the Virginia Association of Governmental Purchasing, and has been regional membership chairman for the National Institute of Governmental Purchasing.

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 a Fort Ward Museum in Alexandria on February and continues through the month of August. Th exhibition includes sheet music, brass, percus sion and woodwind instruments popular durin the Civil War as well as a Cavalry musician uniform.

During the Civil War music was used to exte the virtues of heroes, herald victories an mourn defeats. Weary soldiers quickened the steps in time to "When Johnny Comes Marchin Home," "Tenting on the Old Camp Ground "Dixie" and "The Battle Hymn of the Republic In addition to elevating morale, music reg mented a soldier's day. The blast of the bugle o the beat of a drum announced meals, wake-u and bedtime.

An estimated 14,000 band musicians served i 618 Union Army bands in 1862, at an expense t the government of nearly five million dollars. A times competition between bands was as fierd as rivalries between fighting units. Army unit able to recruit the more famous bands wer considered to be more prestigious.

While the Union bands were numerous an better equipped—with B flat cornets, bariton horns, B flat bass tubas and other brass instru ments-Confederate soldiers were just as de pendent on their music for communications. On note could signal an approaching enemy, say ing the lives of soldiers. General Robert E. Le commented on the value of military bands 1864 when he said, "I don't believe we can hav an Army without music.

While the exhibition concentrates on bras bands and sheet music written for them, it also to a lesser extent, examines the contribution fife and drum corps land impromptu groups that formed at camps where no official band resided

An exhibition highlighting the "Defenses Washington 1861-1865" continues at Fort War and a lecture/concert series will run the secon Sunday of each month through July at 3 p.m.

Fort Ward was built in 1861 to protect Wash ington, D.C. from Confederate invasion. It re ceived its name from Commander James Ha mon Ward, the first Union Naval officer killed i battle during the Civil War

Admission to Fort Ward Museum is free. Th Museum is located at 4301 W. Braddock Ro Hours are Tuesday through Saturday 10 a.m. t 5 p.m. and Sunday noon to 5 p.m.

For further information, call (703)750-6425

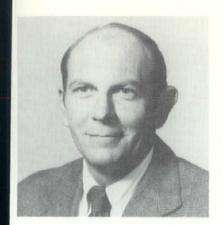
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VIRGINIA RECORD



James A. Morrison

lorrison Is Manager of ew Leonard Jed Co. Branch

The Leonard Jed Company is pleased to anpunce the hiring of James A. Morrison as manger of the new Leonard Jed Company Richond, Virginia branch, at 1727 Rhoadmiller treet. In October 1979 Mr. Morrison accepted e 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 Pawtuckett, 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. Capital Concrete, Inc.

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the Course Bridge at Crown Grant - Atmico County, Va-1979

leveloper Holds Covered Bridge Dedication

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

Henrico Delegate Bill Axelle headed the list of lignitaries and officials present and assisted Ars. Susanne J. Hanky with the ribbon cutting reremonies. Covered Bridge could be consilered quite a "family affair" since Mrs. Hanky's father, J. Wallace Johnson, a structural engineer, designed the covered bridge; her father-inlaw, John J. Hanky, III, 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



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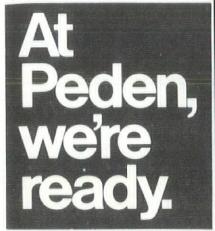
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have favored through the years with the add features of screened porches, decks and Florid rooms. The interiors have captured the elegan of the past and blended it with today's unique styling including deluxe full baths and cofireplaces. Cathedral ceilings, working skylite balconies and lofts are architectually integrate with crown moulding, chair rails and oth colonial trim to present a delightfully ne appearance, one which Richmonders will fir extremely fresh. The homes are selling in the mid seventies to one hundred ten thousar dollars.

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



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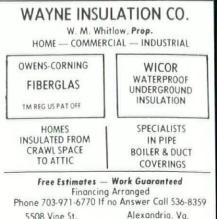
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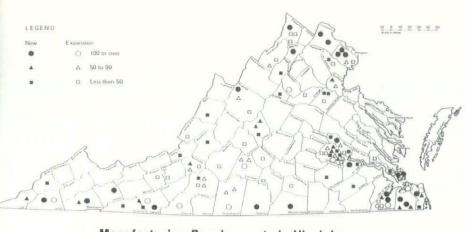






VIRGINIA RECORD





Manufacturing Developments in Virginia Year 1979

Note: This report is compiled from information received from various state agencies, including the vision of Industrial Development, public utilities, railroads, and private development groups. All formation is obtained on a voluntary basis and no claim is made that the list is complete. This port is based on announcements of planned manufacturing capital expenditures; however, in some stances at the time of publication, some of these industries may be in operation.

Announcements of new and expanding manu-cturing firms in Virginia for 1979 total 117, th anticipated employment of about 9,205. xty of these announcements were for new ms with projected employment of 5,903; while were expansions of existing Virginia firms hich will add 3.302 employees. When comred with statistics for 1978, 14 more announceents were made this year, and employment ahtly exceeds the 1978 total of 9,133

Industry in Virginia continues to expand in a ell-rounded way with 18 of the 20 Manufacturg Standard Industrial Classifications repre-nted. The greatest anticipated employment owth is in non-electrical machinery (1,547); llowed by chemical and allied products ,192); fabricated metal products, except achinery and transportation equipment 090); and electrical and electronic machinery. uipment, and supplies (1,022)

Virginia continues to attract foreign-based ms. Among the announcements reported this ar, 19 were foreign-based firms with anticiited employment of about 2120. Twelve of ese were new facilities and 7 were expanons. The number of foreign-based firms locatg or expanding in Virginia rose about 58% over st year's figure. The employment figure ineased by 420 over 1978.

Thirty-four new and expanding plants anunced employment of 100 or more. Twentyree new plants anticipate employment of 100 more with 3 of those anticipating employment 300 or more. They are as follows: Amoco am Products Co. (Frederick County) 400; omsat General Telesystem (Fairfax County) 0; and Koppens Automatic U.S.A. (Chesaake) 300. Of the expansions announced 11 will ploy an additional 100 or more people. Two of ese expanding plants, E. I. Dupont in Chesterld and Goodyear Tire and Rubber Co. in Danle each anticipate 300 additional people.

During 1979, 35 firms announced investments \$2 million or more, 19 of which were for new cilities and 16 were expansions of existing ants. Two of the new plants, The Washington

Post in Fairfax and Virginia Gravure, Inc. in Henrico County, announced investments of \$20 million and \$18 million respectively. Six expanding plants announced investments exceeding \$10 million. They are 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 telecom-munications facility (Culpeper) \$20 million investment. We are aware of 17 non-manufacturing activities representing nearly \$50 mil-lion in investments and over 1700 in employment.

The map above vividly shows the geographic dispersal of the new and expanding facilities in the state. This map includes manufacturing operations only.

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 built 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 country to take this approach 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 Nedre and their two sons, Jonathan, 10 and Jason, 7.



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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?

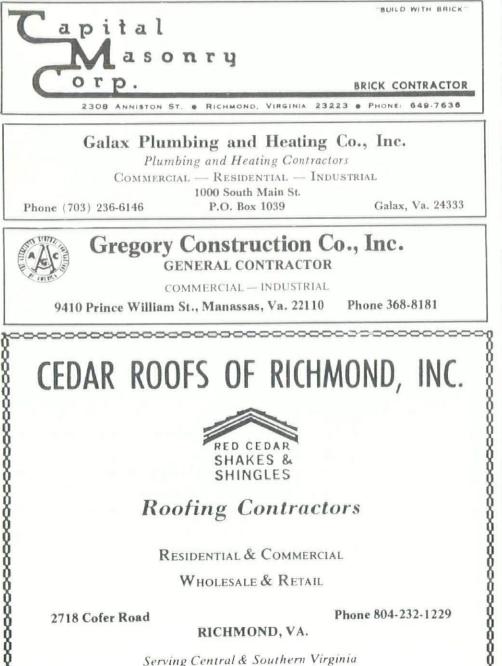
Last year's bills can be forgotten now, but the current year's and future heating bills are coming up and they aren't going to be any smaller. You can, however, take a few preventive steps to minimize the impact of the increase. Althou there are a variety of differenty courses you c take, they can be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

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

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

Heat transfer occurs not only between insid and outside, but also between thermally co trolled areas and those not so controlled, sud as attics, garages, and basements. Most peop are aware of air infiltration through such ope ings as leaks around doors and windows. The leaks can often be controlled by caulking ar weatherstripping. But many people are unawa of air flow through the building "envelope," th roof, floors, and walls. Good insulation can pr vent this kind of air seepage.

Many factors determine whether or not yo insulation is sufficient — the climate in whit you live, the amount of insulation already place, the number and size of windows ar doors, and the attic area in relation to the wa area of the house. These and other factors cor bine to determine the "R-value" of insulation necessary for your house. The R refers to resis ance to heat flow and is a function of both the type and thickness of material used. The high



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e R-value, the greater the resistance to heat w. The proper R-values for the different areas your house (and they must be measured parately) can be determined in consultation th an insulation contractor, architect, or enneer. And the R-values of materials used, hether by a contractor or a do-it-yourselfer. ould be marked on all packages.

Aside from the more obvious windows/doors ttic heat flow potential, some other areas for ose inspection might include

Vater 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 sould be drained out each year

eating 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.

replace. 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.

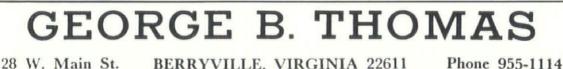
-Basement. It may be necessary to insulate the house foundation walls to protect water pipes and make the basement liveable.

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.

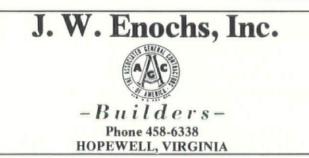
To help sort out some of the confusion, to fully explain R-values and how they apply to your area, and to help narrow the field of alternatives, your architect or contractor can suggest sources of further reading.

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 Insti-tute of Architects, Washington, D.C.)



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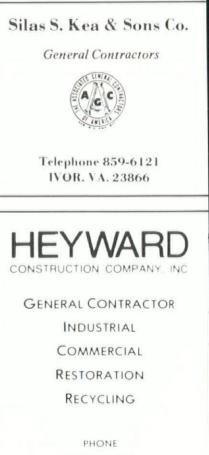
SALES

Inflation/Recession

(From page 5)

rather than discourage this kind of involveme on the part of business and private citizens i well. We must do something about the over regulation by Government—Federal, State an Local—which hampers business. Governme regulation has permeated into every sector the economy and in many cases does nothin but raise costs and fuel inflation. We must als have a more substantial program on the part the Federal Government to foster and encourage the development and use of alternate energy sources.

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



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VIRGINIA RECORD

W. Gordon ementary School

(From page 13)

ot—a cost comparable to prevailing school sts without such energy conservation meares.

A central commons area serves a variety of rposes including building lobby, cafeteria, d assembly space, thus achieving maximum e of space. The library, or resource center, is cated in the hub of the school's circulation ittern to maximize the exposure of students to s learning resources. Classrooms are paired ith movable partitions between to offer flexility in classroom size and teaching methods. Andrews Large & Whidden, Inc. of Farmville as general contractor and handled sodding, eding, etc., landscaping, foundations, conete work, carpentry, structural wood, wall sulation and foundation insulation.

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Also, Lockhart Manufacturing Co., Charlotte, C, metal doors & frames, windows, window all & storefront; Pleasants Hardware, hardare supplier & toilet specialties; A. Bertozzi, c., plaster contractor; E. J. Puma & Assoates, Inc., ceramic, quarry & marble tile; Manon & Utley, Inc., acoustical treatment & resilnt tile; Miller & Rhoads, Inc., carpet; M. P. arden & Sons, Inc., painting contractor/supper; Benjamin Moore Paint, paint manufacturer; S. Archer Co., Inc., operable partitions & rolng shutters; Standard Electric Time Corp., fire otection and alarm equipment & clock sysm; Noland Co., plumbing fixture supplier; Capal Mechanical Contractors, Inc., plumbing/ ating/ventilating/air conditioning contractor; esco (Westinghouse), St. Louis, MO, electrical juipment suppplier; and Hill Electrical, Inc., echanicsville, electrical contractor (Lightolier/Genal Electric/Lithonia fixtures).

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VIRGINIA RECORD

Founded 187

chmond Medical Park

(From page 15)

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

The mechanical system is variable air volume stem, with local supplementary electrical eat. The seclection of this system came about om consideration of the degree of control eeded for the many different types of space use nd orientation. During construction the project as purchased by the Equitable Life Assurance pciety and the project is now over 80% rented; onsideration of phase II is underway.

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

Subcontractors & Suppliers

(Richmond firms unless noted) J. A. Walder, Inc., Ashland, excavating; Watns Nurseries, Inc., Midlothian, landscaping pntractor; Lee-Hy Paving Corp., paving conactor; Lone Star Industries, Inc., concrete conactor; Bowker & Roden, Inc., reinforcing; outhern Brick Contractors, Inc., masonry conactor; S & W Steel Co., Inc., steel supplier/erecon/joists; Ruffin & Payne, Inc., millwork & ood doors; Richmond Primoid, Inc., wateroofing; and E. S. Chappell & Son, Inc., aulking.

Also, N. W. Martin & Bros., Inc., built-up roof & ther roofing; Allied Glass Corp., glazing conactor; Pleasants Hardware, hardware sup-lier; F. Richard Wilton, Jr., Inc., Ashland, gypum board contractor; O'Ferrall, Inc., acoustical eatment & resilient tile; Hungerford, Inc., lumbing/heating/ventilating/air conditioning ontractor: and Varina Electric Co., Inc., Varina, ectrical contractor.

he Carpet House

(From page 27)

ales volume has doubled—a dramatic proof of he success of the design.

Leonard Bros., Inc. of Fredericksburg was eneral contractor. The owner handled ceramic le, carpeting & painting.

Subcontractors & Suppliers

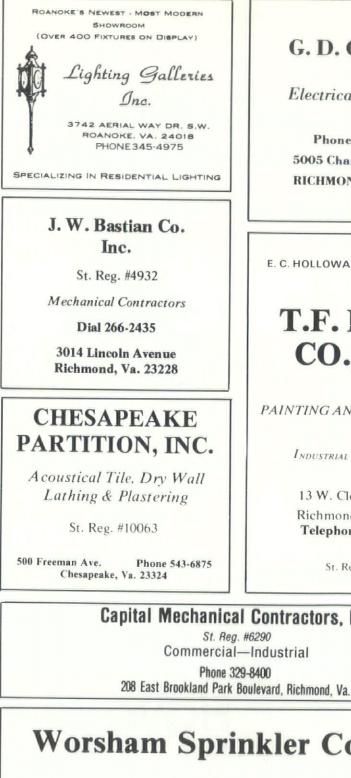
From Richmond were: Liphart Steel Co., Inc., teel supplier/erection/joists/roof deck; J. S. rcher Co., Inc., metal doors & frames; Kawneer 450", storefront; and Lloyd's Ceilings & Dryall, plaster contractor, gypsum board contracor & acoustical treatment.

Fredericksburg firms were: Rappahannock oofing Co., built-up roof; PPG Industries, Inc., lass; Bub's Glass Shop, glazing contractor; J. I. Quann Mechanical Contractors, plumbing

ontractor (American Standard-Raub fixires); Robert B. Payne, Inc., heating/ventilatg/air conditioning contractor; Piedmont Lightig, lighting fixtures supplier; Square "D", elecical equipment supplier; and Tommy Wallace lectrical, Inc., electrical contractor.

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Wood Products Research Center (From page 29)

Co., Inc., miscellaneous metal; Trus-Joist Corp., Richmond, structu wood; Valley Lumber Corp., millwork, paneling & wood doors; Tilley Pa Co., Pulaski, caulking & painting contractor; Valley Roofing Corp., built roof & roof insulation (Celotex) & sheet metal; Karr-Lyle Insulation Co tractors, wall insulation; PPG Industries, Inc., glass & glazing contractor and Tom Jones Hardware Co., Inc., Richmond, hardware supplier.

Also, Harmon Ceiling & Partition Co., gypsum board contractor, acou tical treatment & resilient tile; DeHart Tile Co., Inc., Christiansbur ceramic tile; The Carpet Village, carpet; Devoe & Raynolds Paint Centr paint supplier/manufacturer; American Air Filter Co., Inc., Richmond, du corrector; Magic City Sprinkler, Inc., sprinkler contractor; Kohler Plum ing Products, Norfolk, plumbing fixture supplier; Air-O-Matic, Inc., plur bing/heating/ventilating/air conditioning contractor; Varney Electr Co., Inc., Roanoke electrical contractor (Widelite/Daybrite lighting fi tures); and Square D. Co., electrical equipment supplier.



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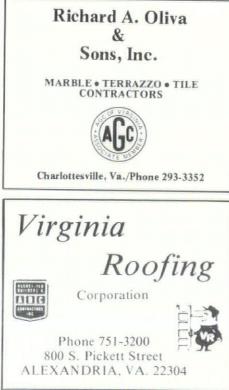
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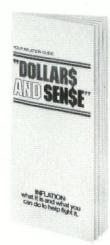


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